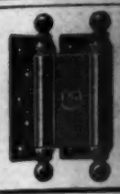
The American Artisan
And Hardware Record

Vol. 50. No. 13. CHICAGO, SEPTEMBER 30, 1905. $2.00 Per Year.



BOMMER SPRING HINGES

(ESTABL. 1876.)

ARE THE BEST

BOMMER BROTHERS, MF'RS. 256 to 276 CLASSON AVE. BROOKLYN, N.Y.

Bolts, Carriage Forgings, Etc.

Catalog and Prices on Application

COLUMBUS BOLT WORKS, Columbus, Ohio.

Always On Top

Any weak spot in your roofs should be attended to now. A leaky roof can cause an immense loss on short notice. **American Seal Elastic Oil Cement** is sure cure. If your roof is old and cannot be soldered this is the one thing to use. American Seal Roof Paints, Metallic and Graphite, preserve and protect. None better, none just as good. Prices are right even if the quality is the very best.

Agencies:

THE PERKINS ROOFING & SUPPLY CO.
235 Lake St., CHICAGO, ILL.

STOCKHOFF SUPPLY CO., 107 N. Main St.,
ST. LOUIS, MO.

NIAGARA

COW CHAINS
Oneida Community
ONEIDA, N. Y.

This Space for Sale. Inquire of Daniel Stern, 69 Dearborn St., Chicago.

WE MAKE

Stove, Tire and Carriage Bolts—Rods, Rivets, Machine Screws, Nuts, Hinge Pins and Special Bolts Screws and Nuts of all descriptions

THE ATLAS BOLT & SCREW CO.
Cleveland, O.

BLACK DIAMOND FILES and RASPS

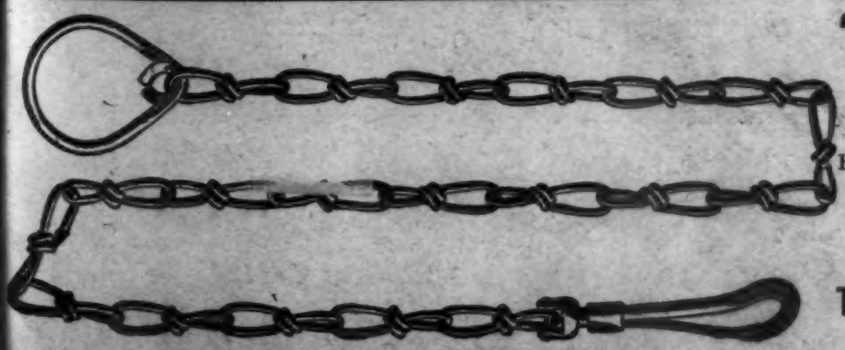
TRADE MARK

PERFECT—ALWAYS

Twelve Medals Awarded at International Expositions

Copy of Catalogue will be sent free to any interested file user upon application.

G. & H. BARNETT COMPANY
Black Diamond File Works PHILADELPHIA



"BROWN" TIE-OUT CHAINS

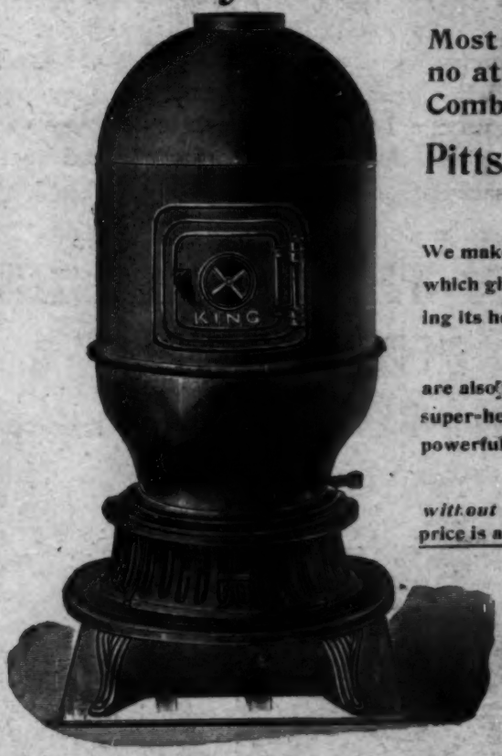
Fitted with Stake Ring, a Swivel every ten feet, and a Swivel Snap.

A FREE SAMPLE WILL TELL THE STORY.

The BRIDGEPORT CHAIN CO.
BRIDGEPORT, CONN.

Economical Cannon Stoves

A Very Rare Thing in the Stove World



Most "Cannon Stoves" are simply "some iron," no attention having been paid to Securing, Perfect Combustion or Economy of Fuel.

Pittsburgh is Famous for its Cannon Stoves

There Are Very Good Reasons for It.

We make the only Cannon Stoves that have auxiliary hanging inner fire pots, which give an efficient air blast to the base of the fire, thus greatly increasing its heating power and securing the durability for which they are famed.

OUR MONARCH AND CHIEFTAIN STOVES

are also fitted with inner cone radiators that draw air from the room and super-heat it before discharging it over the top of the fire—producing a powerful, smokeless fire—with any kind of fuel.

OUR CANNON STOVES ARE VERY HEAVY,

without doubt the heaviest made. **Sizes 9-in. to 23-in. fire pots. Their price is an additional attractive feature. More than a dozen styles in a variety of sizes.**

Pittsburgh Stove & Range Co.,

PITTSBURGH, PA.

The Rival Clermont

Will bring any dealer trade and prestige, for it is better and more handsome than any stove on the market. We say it without hesitation. Its appearance can be judged from the accompanying cut; its construction and other selling qualities will be readily understood by a perusal of our catalog.

Gem City Stove Co.

DAYTON, OHIO.

YOU WILL NEVER REGRET

To Win The Favor of The Cooks

They will serve you many a good turn if you stand in with them. On the other hand your life is to be pitied, at least your commercial life, when you incur their wrath. If they can not get back at you one way, they'll do it another way. If they can't get to put together your meal in a manner that will be a remembrance to you for years, they can spread your reputation to your advantage or most miserable disadvantage, that will last you a lifetime.

Nothing will disgust cooks so much as a bad stove to work on. On the other hand

NOTHING WILL DELIGHT THEM SO MUCH AS A GOOD STOVE

that will do their work. You can satisfy the mumbling cook or the most critical housewife when you sell them

The Kook of Kokomo.

It is our latest addition and nothing has been spared to make it the

Best for the Purpose.

For full details see our catalog.

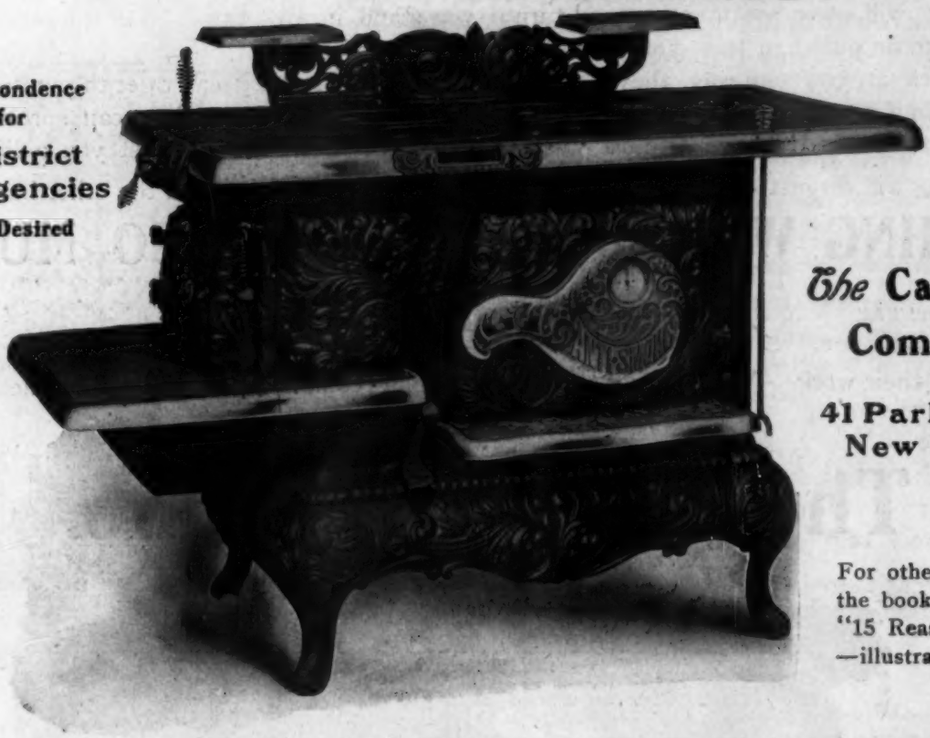
Globe Stove & Range Co.

KOKOMO, INDIANA

MADE IN KOKOMO MADE IN KOKOMO MADE IN KOKOMO MADE IN KOKOMO

The Cahoone Anti-Smoke Stoves, Ranges & Heaters

Correspondence for **District Agencies** Desired



Also Made With Extra Large Reservoir

The Cahoone Company

41 Park Row, New York

For other styles get the booklet "15 Reasons" —illustrated.

The Model Oak

attributes are

Beauty Quality Service

Modernity in Every Respect

No part of it will buckle, warp or crack. Draws air in quantities that can be controlled completely. Operates simply and neatly.

All new features patented and will therefore remain our own.

See our catalog for full description.

THE PORTSMOUTH STOVE & RANGE Co.

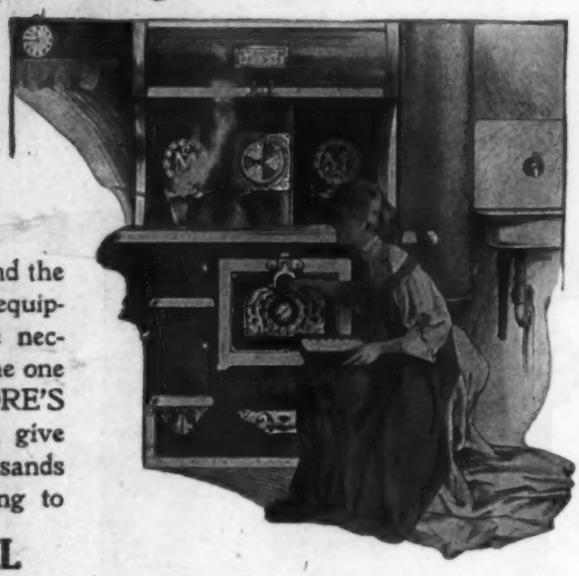
PORTSMOUTH, OHIO

THE BUSIEST MAKERS OF STOVES & RANGES IN THE WORLD

MORLEY BROTHERS Saginaw, Mich., Wholesale Agents for Michigan.

M
TRADE MARK

Moore's Stoves Always Please



Time and Temperature—The Clock and the Thermometer—Each is essential to the equipment of a modern kitchen. Both are necessary for best results in baking and the one quite as helpful as the other. MOORE'S RANGES have thermometers which give the most perfect satisfaction. The thousands already sold keep new business coming to

THE EASY LINE TO SELL

JOLIET STOVE WORKS, Joliet, Illinois.

TO HOLBROOK, MERRILL & STETSON, San Francisco, and Los Ange'

FOSTER'S RELIABLE

A beauty to look at,
A comfort to have,
A pleasure to work at.

Will satisfy the taste of the fastidious housewife and meet the demands of the critical cook.

EVERY PART CAREFULLY WORKED OUT

Study Up Our Catalog.

The Foster Stove Co., Ironton, Ohio.

PHOENIX-MONITOR

THE
GREATEST
VALUE
FOR THE MONEY
EVER
OFFERED

OUR PRICES ARE RIGHT

THIS
IS SOMETHING
TOO GOOD
FOR YOU
TO
OVERLOOK

WRITE FOR SPECIAL PRICE.

The William Resor & Co.
CINCINNATI, OHIO.

ASSORTED PACKAGES MICA

Put up expressly for the Retail Trade

ONE POUND—4 SIZES—¼ lb. each size.

North Carolina,	**$3.10**	4½ x 6	2½ x 3
Wyoming, -	**2.65**	2¾ x 3¼	2 x 5

TWO POUND—8 SIZES—¼ lb. each size.

North Carolina,	**$6.00**	2 x 3	2¼ x 3½
Wyoming, -	**5.10**	2 x 4	2½ x 3
		3 x 3	2½ x 5
		3 x 4½	4½ x 6½

THREE POUND—12 SIZES

¼ lb. each size.

North Carolina,	**$8.50**	4½ x 5	2¼ x 3¼
Wyoming, -	**7.30**	2¾ x 4½	2 x 4
		3 x 3	2¼ x 2¼
		2½ x 3	5 x 6
		2 x 3	2½ x 5
		2 x 4½	2¼ x 3¼

ABOVE PRICES NET. NO DISCOUNT.

CHICAGO **EUGENE MUNSELL & CO.** NEW YORK

Here's a Hot Weather Snap for Wide-Awake Range Dealers

I am going to sell 1000 400 lb. six hole steel ranges finished in Japan for

$15.00 Each

just to keep my boys out of trouble during the hot weather by keeping my foundry running full blast. I'll sell the ranges too, so you'd better get in line and ORDER NOW.

These ranges formerly retailed at $60. each. Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money?

DO YOU KNOW there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them? I would much rather sell to a good hustling dealer than direct to the consumer.

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—it means profits—DOLLARS—to you Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a life time, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition.

AGENTS WANTED

WM. G. WILLARD, Room No. 28 Willard Bldg., 316 CHESTNUT STREET, **ST. LOUIS, MO.**

WHITE'S BEACON

Won the Gold Medal at the World's Fair, and has since won the approval of our customers and all who have used it. It burns the smoke and gas, saves the coal, keeps fire 48 hours and longer, and is the best soft coal stove on the market. Our sales have been very large, compelling us to increase our capacity, but we can fill all orders promptly. Order a sample. DO IT NOW.

THOMAS WHITE STOVE COMPANY

QUINCY, ILL.

WHITE'S STOVES & RANGES THE FUEL SAVERS

WHITE'S STOVES & RANGES THE FUEL SAVERS

Comrade Leader No. 522

Patent applied for.

Sectional Air-Tight Heater, Smoke Consumer and Hot Blast. Inside diameter 20 in., height 70 in., weight 625 lbs.

The most powerful and economical Heater made. Will save its cost in fuel in one season.

Guaranteed to make and radiate more heat from a given amount of fuel than any other stove made. Four 7 inch hot air pipes can be attached to the top. All joints air-tight.

Write for circular and prices and secure the agency of this wonderful Heater.

The A. T. Nye & Son Co.
MANUFACTURERS OF
LEADER STOVE AND RANGES
MARIETTA, OHIO

VACUUM STEAM HEATING (Morgan Patents)
The Marvelous Fuel Saver. Write at once for New Catalogues.
Kellogg-Mackay-Cameron Co. (Sole Owners)
Chicago Minneapolis Kansas City Seattle

Strong Points of Born Ranges

(2) Patent Non-warping Oven Bottom

On account of its shape and thickness the patent Removable Oven Bottom is proof against warping, cracking or burning out.

It is perfectly level and smooth, and so clamped and braced in position as to be easily taken out at any time without damage to the other parts of the range.

The sides and top of oven are made from a single plate of extra heavy steel, flanged and closely riveted between the walls of the range—dust and gas tight.

This construction renders the Born a quick even baker.

The Born Steel Range Co., Cleveland, O.

THE HOUSE-WARMING MANUAL

Is beyond all doubt the best book published on practical house heating.

It contains the plans and essays on heating a house submitted in THE AMERICAN ARTISAN House Warming Competition for $300.00 prizes, and is in fact

An Encyclopedia of the Most Modern and Improved Practical Methods of Heating a House by Steam, Hot Water and Warm Air.

A Leading Western Newspaper says:

"The volume is a well-bound and artistically printed and illustrated volume of nearly 300 pages, and contains some masterly essays on steam heating, hot water heating and warm air heating. Nearly every prominent authority in this field is quoted, and an application of principles and improvements suggested covers all technical details in a simplified and practical way. House plans and diagrams accompany the subject matter, which deals specifically with radiation, combustion, ventilation, prices, estimates, and the best and latest methods for placing, connecting and utilizing the apparatus adopted."

Price, Only $3.50 Per Copy.

For sale by all booksellers or the Publisher

Daniel Stern,
69 Dearborn Street,
CHICAGO.

M TRADE MARK

Moore's Stoves Always Please

A Genuine Bargain

MOORE'S 3 STORY SYSTEM
FOR BASE BURNERS

More for your money, more for your customers money.

THE EASY LINE TO SELL.

JOLIET STOVE WORKS, Joliet, Illinois.

COLE'S HOT BLAST

THE ORIGINAL

For Soft Coal, Slack, Lignite, Hard Coal, Wood and Cobs

The great money maker for the dealer, and dollar saver for the consumer.

3 Styles and 5 Sizes

All sold on our Guarantee which cannot be made on any other stove in the world.

Your customers want the Original Successful Patented Hot Blast. Why waste time trying to sell them an inferior imitation?

If we have no agent in your town, write for catalog and prices to-day.

Shows No. 206 Burning Soft Coal

Cole Manufacturing Company

3218-3238 S. Western Avenue
CHICAGO, ILL.

MONARCH

AIR BLAST FURNACES

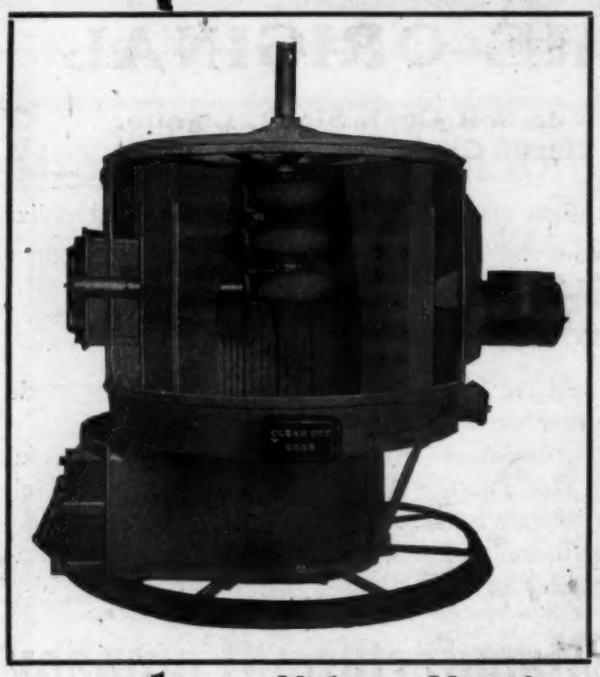
FOR SOFT COAL

If you have not received our 1905 Catalogue, please send for it at once

The Forest City Foundry & Mfg. Co.

Cleveland, Ohio

Eliminate All Chance!



In many furnace jobs there's the big question of "chance"—whether the furnace will really do the work you have said it would.

With the Kelsey Warm Air Generator, all chance is eliminated.

We know—and you know—just what the *Kelsey* will do.

It's a simple matter to refer to similar jobs in which the *Kelsey* has always maintained its reputation for "*More Heat and Better Heat.*"

If you have had trouble with the furnaces you have been installing, would it not be advisable to make a change—to install the Kelsey—an apparatus that you can depend upon for definite, known-in-advance results?

Undoubtedly you will find our Exclusive Agency Proposition worthy of your consideration.

We'll send it to you on request.

"There's Only One Warm Air GENERATOR."

Kelsey Heating Co., Syracuse, N. Y.

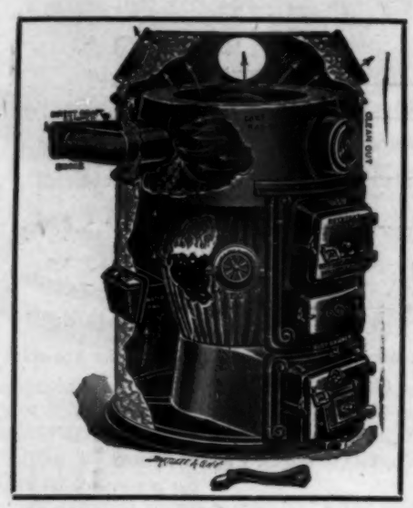
New York City: 156 FIFTH AVENUE
Philadelphia: Builders' Exchange, 24 S. 7th St.
JAMES SMART MFG. CO., Brockville, Ont. Sole Makers for Canada.

Western Sales Agents: COOK & VAN EVERA COMPANY 38 East Lake Street, CHICAGO

THE NAME

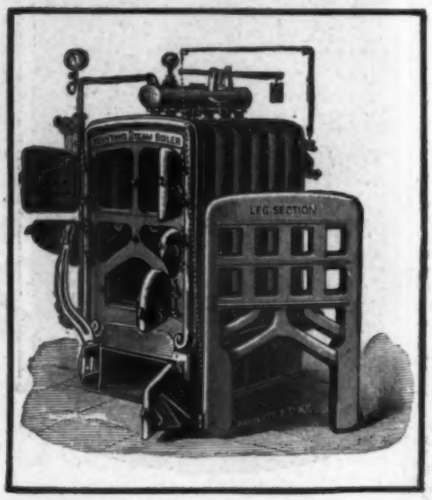
BOYNTON

has an established value when applied to
Furnaces, Steam and Hot Water Heaters.



This has been gained by years of honest value — by giving in 1849, 1860, 1870, 1880, 1890, 1900, 1905 the best heating apparatus made at that time. Our customers know that we keep abreast of the times and are always first in the field with every real improvement.

WRITE US FOR CATALOGUE



The BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO **207-209 Water St., NEW YORK**

TRIUMPH

HOT AIR FURNACES

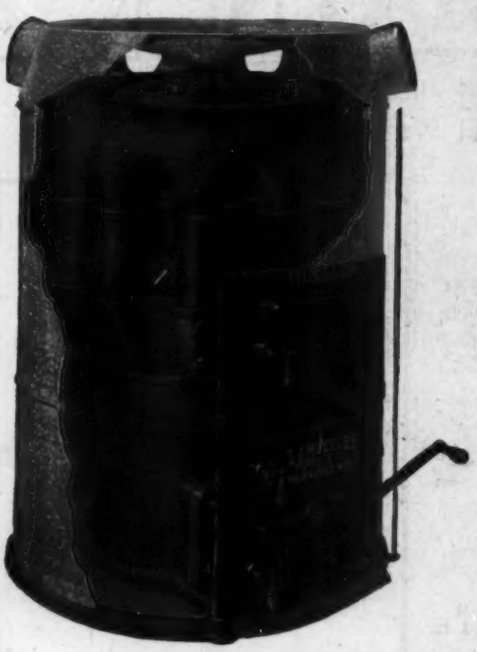
Are Made in
MANY STYLES
and in
MANY SIZES

JOHN KONTNY, Western Agent
65-67 N. Desplaines St., CHICAGO

THE CRAIG-REYNOLDS FDY. CO.
DAYTON, OHIO

Mfrs. Triumph Furnaces, Triumph Hot Water and Triumph Steam Heaters

Are You Out for the Money?



Every dealer is in business to make money—some make more than others. If you are not one of those making more, then the sale of MUELLER furnaces will place you in that class.

Your profits are far greater on jobs where MUELLER furnaces are installed, than with any other heater, because you can readily show your customers wherein the MUELLER far surpasses all other heaters in QUALITY, DURABILITY and ECONOMY.

This subject is worthy of your serious consideration, after which we shall be pleased to hear from you.

Catalogue and prices sent on application.

L. J. MUELLER FURNACE COMPANY

191 REED STREET Established 1857 **MILWAUKEE, WIS.**

The UNION STOVE WORKS

ESTABLISHED 71 YEARS

Manufacturers of

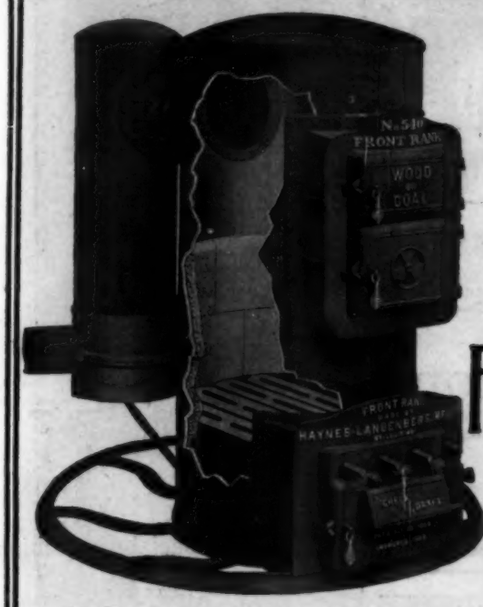
Furnaces, Cook Stoves, Ranges
Laundry Stoves, Heating
and Parlor Stoves, &c.

Four Lines of Furnaces

RED CLOUD, ASTOR,
STORM KING, COMMANDER

Send for our Catalogue and Price List also our Pamphlet entitled "Four Warm Propositions", telling all about our furnaces.

70 Beekman and 66-68 Gold Street
NEW YORK, U. S. A.



FRONT RANK STEEL FURNACES

20 years of experience in the manufacture of steel furnaces.

enables us to present the type shown herewith. It is the embodiment of the strongest features gained in our long experience. Ten thousand in use in St. Louis alone. Thousands in all sections of the country attest our claims of superiority. Burns hard or soft coal, wood, gas or coke.

The FRONT RANK is built like a boiler, has no cast fire pots to crack or warp, nor cemented joints to leak gas.

The FRONT RANK is a very powerful heater, because it has a long vertical fire travel.

HAYNES-LANGENBERG MFG. CO., Mfrs.
ST. LOUIS, MO.

FRONT RANK STEEL FURNACES AND HEATING SUPPLIES.

MONCRIEF
WARM AIR FURNACE

Specialties:
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy.
- Cleanliness in Use.

HENRY & SCHEIBLE COMPANY
6-8-10 Long St., Cleveland, Ohio

Sales Agent—J. C. KIMMEL, 3314 East 15th St., Kansas City, Mo.

ROBINSON TUBULAR

Small Flues
Many Flues
Long Flues
Seamless Flues
Revertible Flues
Indestructible Flues

Full Return Flue Radiator

A TAPE MEASURE TELLS WHY IT SELLS

ROBINSON FURNACE CO.
170 Lake Street, CHICAGO

600 Different Specialties

Household Inventions and Bath Fixtures.

If you haven't our catalog write at once.

SILVER'S BROOKLYN

304-314 Hewes St. 432 Broadway

BROOKLYN, N. Y.

BARKEEPER'S FRIEND

Marble, Glass, Nickel, Brass, Copper, Tin and German Silver can all be cleaned and polished with it easier than with anything else.

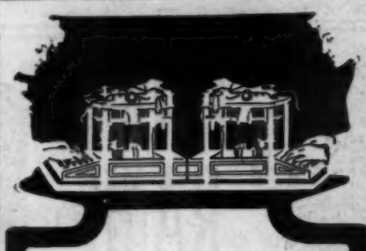
Price 25c per lb.

Highest Award:—Chicago World's Fair, 1893; Louisiana Purchase Exposition, St. Louis, Mo., 1904.

Let us send you a FREE SAMPLE.

GEO WM. HOFFMAN
295 E. Washington St.
INDIANAPOLIS, - IND.

FOR SALE BY JOBBING TRADE



Good Operators Say

that they can do more and better work with less effort on the

Remington

than on any other writing machine.

Remington Typewriter Company
327 Broadway, New York

1,000 Years

ago leisure moments were passed in the company of "wise fools" and Merry-Andrews. Now people read. By some people, leisure moments are moments of amusement. Other people find recreation in a small amount of study. The latter are the kind that have two horses for a one-horse buggy.

100 Tinners' Patterns

will help to buy the extra horse. Sent postpaid on receipt of $1.00. Our descriptive circular tells why it's up to you.

DANIEL STERN
69 Dearborn Street
CHICAGO

We have a special proposition to make on

Independent Natural Gas Heaters

Write us.

INDEPENDENT MANUFACTURING COMPANY

CLEVELAND, OHIO

EMPEROR FURNACES

FOR WOOD

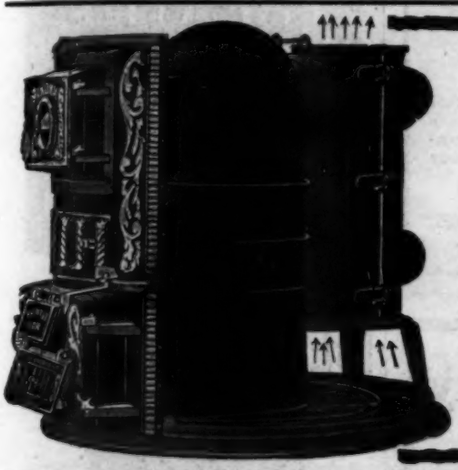
SIMPLE SAFE DURABLE

ECONOMICAL IN FUEL

The Best and Cheapest Line of Wood Furnaces.
Furnished for either Brick or Galvanized Iron Casing.

BERGSTROM STOVE CO.

Send for Catalogue **NEENAH, WIS.**



A SOLID COMFORT

is the furnace that exposes the greatest heating surface, loses a minimum of coal energy, and requires the least attention.

The "Low Down" Crown Furnace

is satisfactory in every respect. It gives the greatest amount of heat. Its supply of oxygen from the air is so regulated that there is no undue amount of ashes or soot, and it burns so neatly and steadily that it can be left to itself for hours and hours. Get our new furnace book where its construction is fully shown, and you will see how it meets all demands.

March-Brownback Stove Co.

POTTSTOWN, PA.

THE MONARCH
Annealed Steel Warm Air Furnace

Large radiating surface.

Revertible flues preventing loss of heat.

Gas, dust, and smoke-tight proof, affording comforts unknown to those using inferior makes.

Has a patented revolving grate by which the ashes are thoroughly cleaned and oxygen admitted freely to give clear and intense burning.

Ventilating system perfectly adjusted to waft continuous and uniform supply of fresh, warm air.

Manufactured by

KRUSE & DEWENTER, 427-429 E. Washington St., **Indianapolis, Ind.**

Send for Catalog and Price List.

ASBESTOS FURNACE CEMENT.

BUY ONLY COLEBROOK'S ASBESTOS FURNACE CEMENT AND STOVE PUTTY.

Best that can be manufactured and quality tells. If we please you tell others; if we don't, tell us. All we want to know is what you want and we can fill the bill. **COLEBROOK'S ASBESTOS FURNACE CEMENT** gets as hard as iron and no heat can destroy the same. Put up in all size removable cover cans, tubs, bbls. and half-bbls.

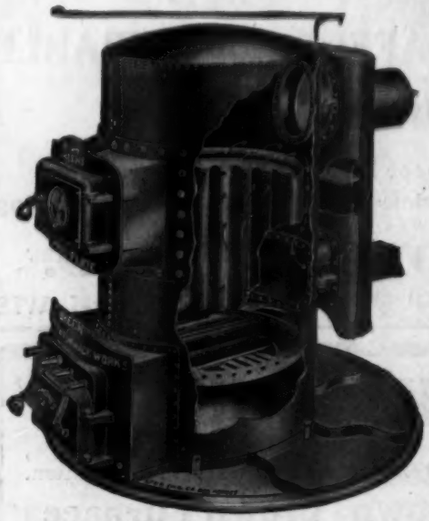
Insist on having **COLEBROOK'S ASBESTOS FURNACE CEMENT** and **STOVE PUTTY** and you will not have to apologize. Samples for the asking. Manufactured only by

W. H. COLEBROOK & SONS,

SYRACUSE, N. Y., U. S. A.

LARGEST MANUFACTURERS OF ASBESTOS FURNACE CEMENT IN THE WORLD.

IN CHOOSING A LINE OF FURNACES



to sell to your trade there are a few things of prime importance to consider.

In the first place there must be no question about the furnace giving satisfaction to your customers. They must be no experiment.

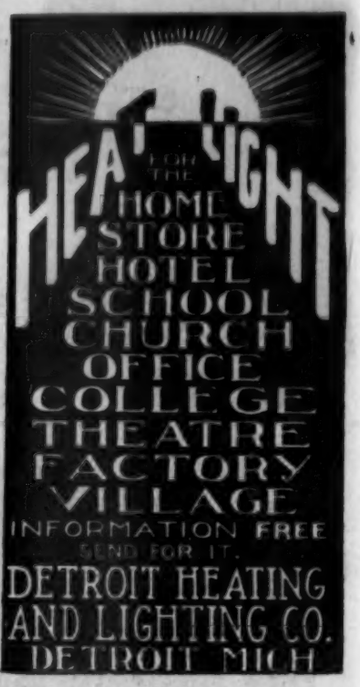
Then you should be able to get them promptly in the rush season, when a few days delay may mean the loss of a job.

You should not pay big freight charges from some eastern point when you can beat both the goods and prices nearer at home.

You should, if possible, buy the entire material for the job from one house at one shipment.

You should remember that if you sell Green Furnaces you will have all these advantages. It pays to have our agency.

GREEN FOUNDRY AND FURNACE WORKS, DES MOINES, IOWA.



Floral City Hot Water Boilers, Steam Boilers

are leaders. We have a full line of round and sectional water and steam boilers.

Write us for catalogue.

MONROE FOUNDRY & FURNACE CO.
MONROE, MICH.

IDEAL FURNACES

Always please the purchaser.
Have great heating capacity.
Burns soft or hard coal or coke.
Large and heavy fire pot.
Gives more heat, with less fuel, than others.
Requires but little attention.
If you want more information about this furnace, write to

THE H. P. DEUSCHER CO.,
HAMILTON, OHIO.

WILSON & LESLIE, SOUTH BEND, IND.,

WRITE:

"We are surprised at the great circulation of THE AMERICAN ARTISAN as we have received letters from a great many different states."

It is merely

A Question as to Cost

The superiority of steel over cast iron is to-day readily conceded

Let us quote you prices on

Steel Casing Rings

Compare them with your cost of Cast Iron Rings, and see how much you can save by buying from us. Made to order from your own dimensions.

Always Fit

Ready to Use

The Walworth Run Foundry Co.

Makers of Fine Stove Plate and Furnace Castings. **Manufacturers of Warm Air Registers.**

883 Empress St., CLEVELAND, OHIO

Height over all, 65 inches.

The Stanton

Seamless Warm Air Furnace

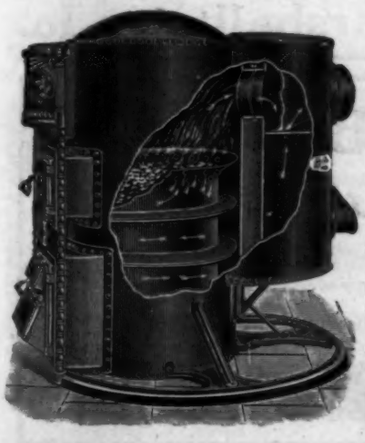
Why sell a cheap and inferior line of Furnaces, simply because your competitor does.

There is no money in handling cheap Furnaces. They are sold on price alone, and not on merit. The STANTON SEAMLESS STEEL FURNACE has been on the market for ten years, and many of them in use for that length of time without repairs, and still good.

Write for our catalogues which give full description.

The Stanton Heater Co.

Martins Ferry, Ohio



Scientific in Principle, Satisfactory In Every Way

Built upon the results of recent investigations in furnace economy it is nothing but up-to-date. It utilizes every unit of energy possible, gives the greatest comforts, and will serve a lifetime. It will pay you to see our catalog.

The Meyer Furnace Co. Peoria, Ill.

The Handy Furnace Pipe

Should be in every hardware store.
People will call for it as soon as they see what advantages it insures.

Write for catalog.

F. MEYER & BRO. CO.

Peoria, Ill.

The Gilt Edge Badger Furnace

is designed

For Hard Coal Exclusively

Combining all the characteristics of the most advanced apparatus of its kind. Every objectionable feature in heaters built on somewhat similar principles has been overcome. To avoid the cracking of the fire pot, for instance, it is made in two sections, thus obviating the strain which results from expansion and contraction. The ash pit door is made large to reduce all inconvenience in removing ashes. And most important of all, the body of the furnace is made low, leaving the greatest amount of space for the dome.

The advantages will be readily seen by a comparison of this furnace with others on the market.

WRITE FOR CATALOG

R. J. SCHWAB & SONS CO.

MILWAUKEE, WIS.

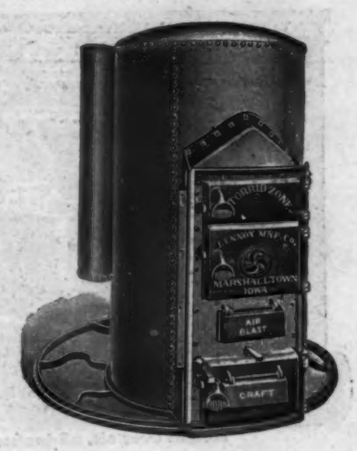
Lennox Torrid Zone Steel Furnaces

Built of heavy steel plates, riveted gas tight. Not a packed joint in the job.

Now sold in twenty-two states, and throughout the Canadian Northwest.

Largest factory in the world for making steel furnaces.

Dealers who want a durable, quick heater, easy to set as a stove and easy to manage, should write



The LENNOX FURNACE CO., Marshalltown, Ia.

SOME MORE BOOKS

A Series of Practical Volumes with Numerous Illustrations.

"*Practical Draughtman's Work*," 226 illustrations. This one contains many points relative to this line of work. $1.00 prepaid.

"*Practical Gas Fitting*," 120 illustrations. This one contains all practical points connected with gas fitting of every description. $1.00 prepaid.

"*Practical Stair Case Joinery*," 215 illustrations. This one contains many beneficial points for the practical workman as well as good hints for the amateur. $1.00 prepaid.

"*Practical Metal Plate Work*," 247 illustrations. This one contains numerous engravings and diagrams, and is unusually clear and true. $1.00 prepaid.

Any one of these books and all others of any line can be secured upon receipt of price, prepaid by addressing

DANIEL STERN, - - 69 Dearborn Street, Chicago, Ill.

Monitor Furnaces and Combination Heaters.

You can secure a copy of our complete 1905 catalogue by sending us your request for one. The finest half-tones illustrating the various constructions of complete furnaces and sectional views of important features with descriptive matter setting forth the many advantages. If you are interested in the subject of heating, we will be pleased to mail you one promptly and quote you prices and terms.

Our traveling representatives are experienced and practical men, who, when desired, make plans and estimates free.

We solicit the trade. Write for our catalogue.

KEITH FURNACE COMPANY, DES MOINES, IOWA.

Manufacturers of

MONITOR FURNACES and COMBINATION HEATERS, REGISTERS, FURNACE PIPE and FITTINGS.

LION COMBINATION FURNACE

Do you want to earn your money honestly, on furnaces that bring in profits because they are good?

Do you want to keep your patrons satisfied because they get something substantial, and be happy yourself, resting with an easy conscience that you have earned your profits, not stolen them?

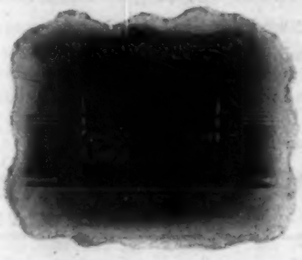
You do, if you are a thinking dealer. In that case

Investigate the Make of

The Youngstown Furnace Co.

YOUNGSTOWN, OHIO

The Universal Side Wall Register



The handsomest design. The largest air capacity. The cleanest, the easiest to operate. The cheapest, quality and utility considered. Valve operated by foot. No burning of hand opening or closing valve. Valve held at any point by compression springs. As easily attached as a common register.

A Sample order will prove truth of above statements.

MANUFACTURED BY

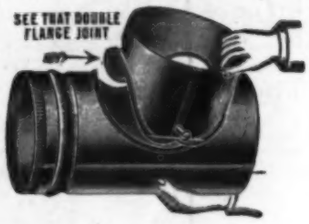
SCHREIBER & CONCHAR MFG. CO.

DUBUQUE, IOWA

HANDY NESTED STOVE PIPE T JOINT

Saves 90 per cent of room.
Saves 75 per cent of freight
Does not damage in shipping.
Is stronger and neater than a hand made riveted T.
Is always ready for use.
Fastens together with two bolts.
Is a perfect fitting joint.

Never the rusty and unsightly T Joint usually offered for sale. Always neat, clean and salable. Packed ten 12-inch joints in a crate 7x8 inches and 14 inches long. Weighing 15 pounds. Made in Common, Polished Blue Steel and Planished Iron.



ASK YOUR JOBBER FOR THEM.

KINNE MANUFACTURING CO., - - - - Minneapolis, Minn.

From Ogden Johnston & Co., Carbondale, Ill.:

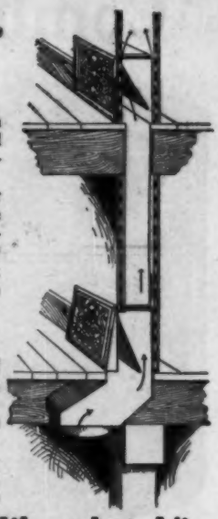
Please take our advertisement out. We have secured results. Your paper certainly reaches the craft. Long may it flourish!

9-5

Some goods are sold by bluffing

The Schwab Side Wall Register is Sold on Its Merits

Original in Construction, Artistic in Design.



This register is the neatest design of any on the market. This register being made of cast iron has a straight, smooth surface on the edge making it easy to fit the base board against the same and to remove the face at any time thereafter when it is desired.

The No. H, single faced register has a collar to the register box 7x13¼" inside full measurement. The No. T, double faced register box has a collar 9⅝x15¼" inside full measurement. These measurements are larger than are actually furnished by any other manufacturer sending register box with the register. This register is made with a flange within which to fit the register box making a tight fit.

The box and register are sent separate and adjustable.

Registers are made full size published.

This register is one of the factors of a Modern System of Heating residences by a radical change in the installation adopted and practiced by us more than by all others combined.

Safe delivery and durability guaranteed. Goods sold only to the hardware trade.

Send for our booklet, "Modern Methods of Heating Residences" or plan for heating residences under this system furnished free on application and results guaranteed by the

R. J. SCHWAB & SONS CO., The Furnace Men, Milwaukee, Wis.

"T & B" REGISTERS

T. & B. Special Side Wall Register
Something new. Have you seen it?

ESTABLISHED 1846

THE OLD RELIABLE

AWARDED FIRST PRIZE IN ALL INTERNATIONAL EXHIBITS—Philadelphia 1876. Chicago, 1893. Paris, 1900. Grand Prize and Two Gold Medals, St. Louis, 1904.

We now have an Exhibit at the Lewis & Clark Exposition, in the Manufacturers Building, Portland, Oregon.

Our goods are the standard of comparison and have stood the test for over sixty years. They will please your architect, your customer and you, and when installed will last a lifetime. Don't try experiments with other registers.

Our stock of registers is now 600,000 pieces and we can fill your orders *immediately*.

TUTTLE & BAILEY MANUFACTURING COMPANY

NEW YORK CHICAGO BOSTON BROOKLYN

SAVE HALF YOUR FUEL

by using the

ROCHESTER RADIATOR

The Part that Does the Business

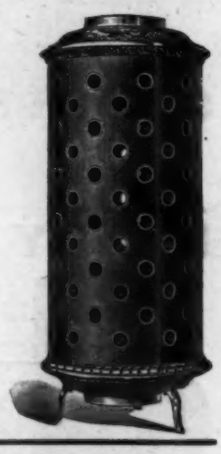
Satisfaction guaranteed or money refunded.
Over 100,000 of them in use.
Fits any stove or furnace.
For Hard or Soft Coal, Wood or Gas.
Price from $2.00 to $12.00.

One square inch of radiating surface directly over the hot current is better than six in a drum or side heater with perpendicular tubes.

Easily cleaned. We guarantee our radiators not to interfere with, or choke the draught.

Write for descriptive catalogue and prices.

ROCHESTER RADIATOR CO. 120 Furnace Street ROCHESTER, N.Y



Smith's Hot Water Attachments

Are known from one end of the country to the other. They are used in almost every successful furnace job. They are made in all capacities, from a 30-gallon tank to one carrying 1,000 ft. of radiation. Our booklet tells the story.

CHAS. SMITH CO., 103 Lake St., Chicago.

W. C. T. HAMILTON, Minneapolis, North Western Agent.

Omaha Stove Repair Works, Western Agents.

Listen to this.

THE VENTILATING FEATURE IN

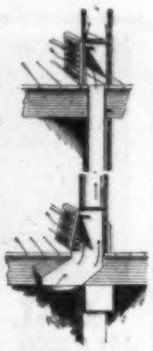
The Jones Registers

AND

The Jones System of Heating & Ventilating

have made it possible to successfully heat all of the rooms, all of the time.

Over 5,000 of the best furnace dealers in the United States and Canada are using Jones Registers, and have no *"sick jobs"* as was the case with *Floor Registers. This is owing to the Ventilator which is a part of the Jones Register.*



With Jones Registers but one-half the number of basement pipes are necessary.

Even our advertising cuts are imitated.

By the use of Jones registers the cost of installing furnaces *is reduced and the efficiency of furnaces is increased.*

Jones registers are made of pressed steel. The surface of each register is highly polished before being formed which insures *finer finish* than is possible with cast iron.

They have greater capacity by about 50 per cent, and when this is considered *cost less.*

They cannot break in transportation or with expansion *as is the case with Cast Iron Registers.*

We guarantee prompt shipment.

Infringements of the Jones patent will be prosecuted

Our booklet "Advanced Methods of Warm Air Heating" FREE.

We make heating plans and itimized estimates in accordance with the Jones System of heating and ventilating without charge, and guarantee perfect results where Jones Registers are used.

A No. 15 JONES REGISTER.

For heating large first floor rooms. Bottom Collar, 7x13½. These Registers are fitted with a Top Collar which fits 3¼x12 single or No. 8 double wall pipe when two rooms are to be heated (one above the other) from one large basement pipe and are fitted with an asbestos lined plate when used for heating one room on the first floor.

JONES REGISTERS ARE MANUFACTURED ONLY BY

THE UNITED STATES REGISTER CO., Ltd.

BATTLE CREEK, MICH.

For sale by legitimate jobbers everywhere.

FERROSTEEL REGISTERS

WE MAKE ALL LINES.

All Cast
Modified Steel
All Steel

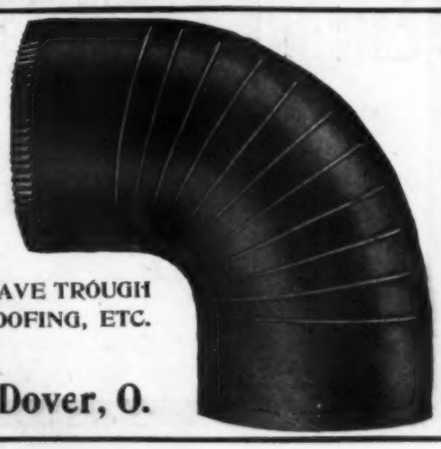
Quality everlastingly the best
Prices everlastingly the bottom

OUR
- **ALL CAST** Are time tried and worth proven.
- **MODIFIED STEEL** The novelty success of 1904.
- **ALL STEEL** The acme of excellence in wrought steel.

THE FERROSTEEL CO.. 34 Michigan St., CLEVELAND, OHIO

A Few Points About

THE DOVER ELBOW



No unsightly seams or corrugations to give it a bunched appearance.
No corrugations to reduce diameter and collect soot.
It is made on a scientific principle and is the same diameter as the pipe.
The ONLY ELBOW with a smooth surface, permitting of a high polish.
Shipped in BOX CRATES, insuring perfect goods at destination.

Also Manufacturers of the

DOVER PATENT NESTED STOVE PIPE, GALVANIZED EAVE TROUGH and CONDUCTOR PIPE, CORRUGATED IRON, STEEL ROOFING, ETC.

WRITE FOR CATALOG AND PRICES

The Reeves Manufacturing Co., Canal Dover, O.

MUELLER
WALL REGISTERS

Simple
Durable
Quickest Installed
Greatest Capacity

We also make a complete line of Floor Registers. GET OUR PRICES.

L. J. MUELLER FURNACE CO.
191 REED STREET Established 1857 MILWAUKEE, WIS.

HELLER'S STEEL SHELF BOXES

SEND FOR PRICES

W. C. HELLER & CO.
MONTCLAIR, N.J.

"BLUE BOOK" CREDITS

—OF THE—

Iron, Steel, Hardware, Stoves, Tinware, Plumbing, Etc., Trades.

This Agency issues as complete and reliable book of credit ratings fo this special branch of trade as has ever been published, containing about 400,000 rated names of wholesalers, retailers and manufacturers, covering the trade thoroughly. The ratings are conservative and very reliable. The *paying record* is based upon *ledger experience* of credit men everywhere.

You buy credit information. Isn't it the part of a good buyer to post himself thoroughly on the merits of a book of ratings, gotten up especially for his trade by men with ample capital and who are thoroughly trained in this class of work and who make a *specialty* of it?

Terms of subscription can be had by addressing Executive Office

Iron and Hardware Mercantile Agency.

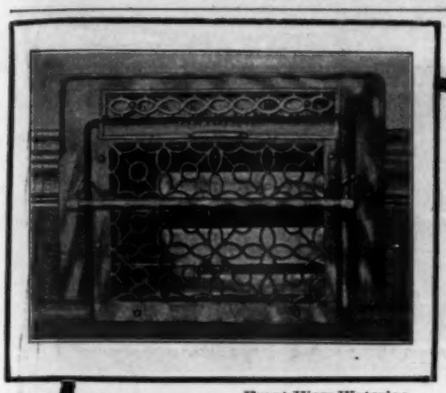
157 Federal Street. BOSTON, MASS.

It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades. Address

DANIEL STERN
69 Dearborn St., CHICAGO



Front View Waterloo

WATERLOO REGISTER COMPANY,
Waterloo, Iowa.

DISTRIBUTORS.
Prest Heating Co., Kansas City, Mo.
Hibbard, Spencer, Bartlett & Co., Chicago, Ill.
Stratton & Terstegge, Louisville, Ky.
Peck-Williamson Heating Co., Cincinnati, Ohio
Pease-Waldon Co., Winnipeg, Manitoba.
Agents for Canada.

A Useful Ornament

There are several featuresin the WATERLOO, aside from the water pan, that makes it strongly desirable. The unique method of opening and closing the valves with the foot rest: When foot Rest is extended, valves are open; when Rest is pushed back out of the way, valves are closed.

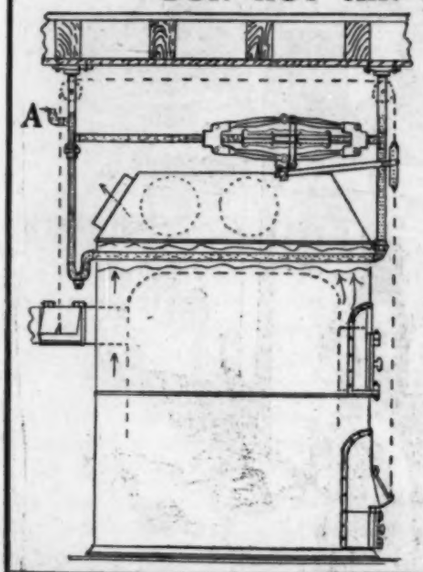
The WATERLOO Side Wall Register is attractive in design and neatly finished,—

And the Evaporating Moisture-Supplying Water Pan adds very little to the cost.

Our little booklet tells the story of the WATERLOO in a clever, interesting way.

It shows the WATERLOO inside and out,—and we'll send the booklet *and our quotations to any Furnaceman on request*

LAWLER'S THERMOSTATIC REGULATOR
FOR HOT AIR FURNACES.



This illustration shows a Lawler Regulator applied to a hot air furnace for automatically controlling the furnace heat to any desired temperature.

It is the most perfect machine for the purpose in the world.

Good reliable furnace men in every city, wanted to handle this furnace Regulator.

LAWLER REGULATOR CO.
158 Wooster St., NEW YORK CITY.

Our Western Agents:
THE NORWALL MFG. CO.,
138 Jackson Boulevard, CHICAGO, ILL.

STERLING AIR HEATING RADIATOR

Easily attached to any STOVE, RANGE or FURNACE using any kind of fuel. **Doubles the heating capacity or saves 50 per cent of fuel expense.** Insures warm floors, uniform temperature, **continuous circulation**, comfort and health. From 50 to 90 per cent of the heat usually escapes up the chimney and is utterly lost.

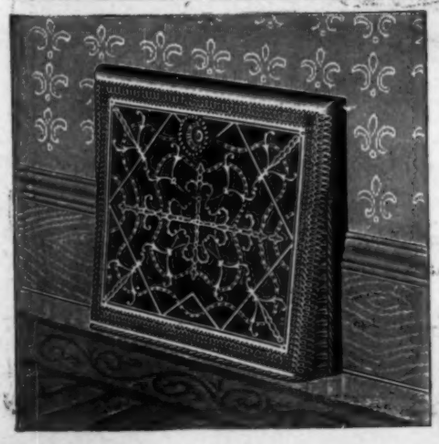
The Sterling Radiator saves and utilizes this heat. Can be used in adjoining room or in room above stove with excellent results.

Constructed on scientific principles. Does not interfere with draught. Always satisfactory. Nothing like it. Neat. No other radiator that will admit of comparison.

A money maker for dealers.

Write for full description and terms.

STERLING AIR RADIATOR CO.
617-60 Wabash Ave., Chicago, Ill.



WHY DON'T YOU GET THE BEST?

Stowell Side Wall Registers
Furnished Either With or Without Boxes

BOXES furnished with tin strips on sides by which they can be readily fastened to wall and to Register. The box is furnished with a collar for stack extension or with solid top and is made for first and second floor as well as two registers in opposite rooms or double headers. Full line Floor Registers and Boots. Send for new Catalogue D.

Stowell Mfg. & Foundry Co.
51-73 Milwaukee Ave., SOUTH MILWAUKEE, WIS.

ROUND OAK
Standard of America

"Estate of P. D. BECKWITH,
Dowagiac, Mich.

Gentlemen:

We send you, in today's mail, sketches of two houses for which we wish furnace plans. You will note that the dotted lines indicate cellar and the furnaces will have to be located within the walls. We today took two additional contracts for Round Oak Furnaces, making a total of thirteen this season. This is the direct result of our previous work—our best advertisement being the satisfied customer who used the Round Oak last winter. It has taken three years to get these results, but we have absolutely done no advertising this year, as we will probably be completely overwhelmed before the season is over. We have two gangs now at work, and with our usual tin work do not see how we can do more, but if they want a Round Oak we are sure they will wait. We have three—or rather four—jobs that men have not asked us cost, but told us to go ahead and put them in.

We have always done first class work and it is beginning to count."

This letter was received in the regular course of business, and name of writer will be promptly sent to any dealer interested enough to ask for it. It is published to prove that an enduring, satisfactory furnace business can only be built up on a good furnace and good furnace work. Whenever you are ready for still more convincing proof that Round Oak Furnaces and Round Oak methods are winners, just write us. "Warmth and Comfort," our furnace book, sent on request.

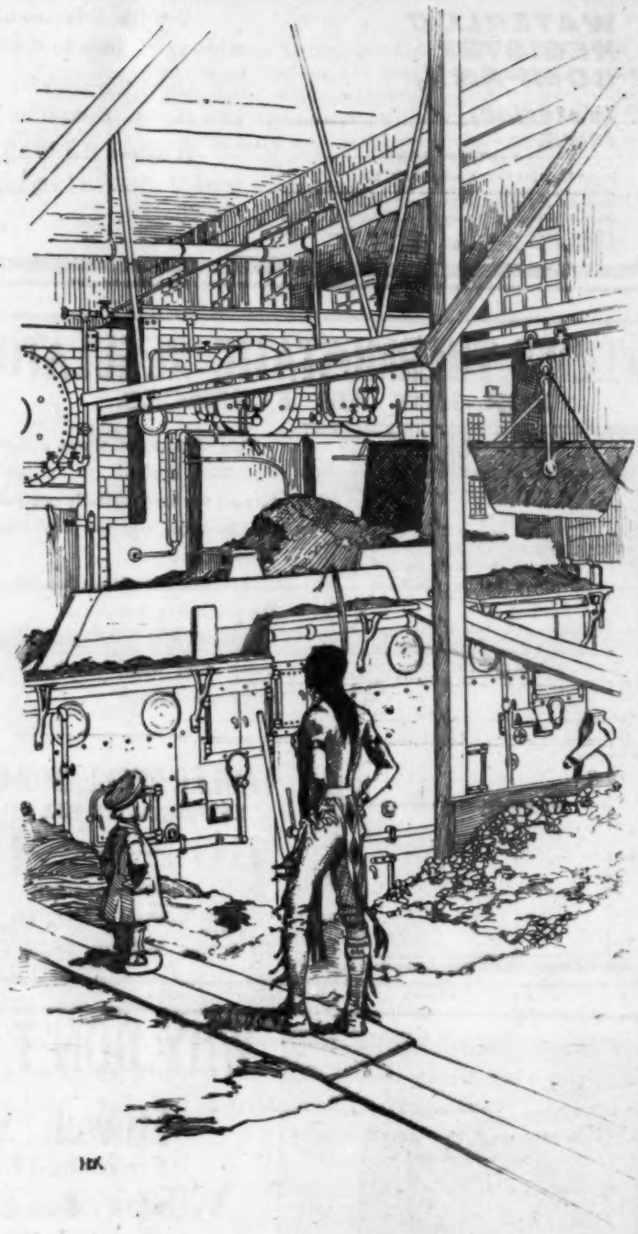
ESTATE OF

P. D. BECKWITH

FRED E. LEE, Manager

DOWAGIAC, MICH.

MAKERS OF GOOD GOODS ONLY



"This is the boiler room, Fritz. The fires are tended by an automatic stoker. All the gases and carbon which once escaped in the shape of black smoke are now burned up—same hot-blast principle as is used on the Round Oak Stove and Furnace."

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, communications, and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, SEPTEMBER 30, 1905.

AT A meeting of the Tariff Commission, held at Winnipeg, Manitoba, September 7th, a delegation of Western representatives of Eastern Canadian stove makers put forth a plea for increased protection. It was urged that the manufacturers of the United States were crowding the Canadian stove makers out of the Western Canadian markets.

THE REMARKABLE demand for iron and steel products in this country is duplicated by a coincident demand in Great Britain and the continent. The unsatisfactory trade in iron and steel products in England for the last three or four years has been due, in great part, to the evils resulting from the Boer war and from the recently settled war in the far East. There is now evidence of an improved sentiment.

CONSUL ANDERSON of Amoy, in advising American manufacturers and exporters how to secure trade in China, voices the opinion that a good quality of material and construction, combined with a reasonable price, will do the work. The Chinese are not satisfied with poor quality and, on the other hand, they are not sufficiently wealthy to pay for the best. Cheap goods, especially in staple lines, are apt to suffer in competition with domestic products. Ornamental work—in fact, everything contributing toward the better appearance of a product without adding any material value toward its practical usage—should be tabooed.

AT A meeting of the soft coal operators held in Columbus, Ohio, Sept. 16th, prices on all grades of soft coal were advanced fifteen cents a ton. The action was duplicated by the Pittsburg operators, the new prices having gone into effect Sept. 18th. It is said that the price of coal is stiffening and that a further increase will be made during the coming months. This action, coupled with the ominous rumors coming from the anthracite regions of Pennsylvania concerning movements to be undertaken after the termination of the peace agreement between the coal miners and the operators, is of a nature to set the large consumers of coal to thinking.

IN ADDITION to heavy buying of steel rails on the part of Japan during April, May and June of this year, Japan is expected to purchase at least $30,000,000 worth of rails and track supplies during the coming two months. One-third of this material will go to Great Britain, Germany and France. It is anticipated that the other two-thirds will be booked in this country. Japan has the entire reconstruction of the Korean railway on her hands. The railways of southern Manchuria are now under the control of the Japanese and likewise need reconstruction. Japan will also purchase about seventy-five locomotives and in the neighborhood of three thousands cars. The Japanese markets are now quite susceptible to American invasion for all kinds of iron and steel products.

GERMAN papers report that Cowper Coles, an Englishman, has invented a new process of galvanization, and has recently demonstrated the same with samples of iron, copper, aluminum, and other metals. The objects to be galvanized are simply heated to 260 degrees, in a bath of zinc vapor, the duration of which depends upon the desired thickness of the coating, but which is always short. After heating the objects are thoroughly coated with a layer of zinc, which on the surface has formed an alloy with the other metal by penetrating into it to a considerable depth.

A copper rod can in this way be almost entirely transformed into brass, while the temperature employed remains far below the melting point of both metals. A great advantage of the process lies in the evenness of the coating, which is so perfect that such zinc-galvanized screws and bolts afterwards fit perfectly into the nuts, while with other methods they have to be polished. It is also very convenient in that the objects to be galvanized have not first to be cleaned.

The retorts in which the heating takes place are of iron and are heated from the outside. Another peculiar advantage is that the zinc does not adhere to the walls of the retort, but that these, after months of use, are entirely clean. The explanation for this is that the walls of the retort are heated most, so that no zinc vapor condenses on them. Experiments to use the process with metals other than zinc have been so far made with copper and antimony, and have been partly successful, but not to a degree to make them of practical use.

A Good Start.

POSSIBLY nothing better illustrates the insignificance of human beings than their impotence in greatly improving conditions. On the whole, all of the human species are much alike in appearance, ideas and physique. The man who is capable of departing from the standard by a very little is famous. The man who lives twenty-five years ahead of his age is never forgotten by history. Heredity and environment are so stringent as to form an almost impassible barrier, effectively keeping men within certain limits of thought

and appearance. Each man is only one in a billion and to successfully differentiate one unit from another requires the eye of a skillful student of character. To the man in the moon we would all be alike. And just as our ideas are much akin, so does it happen that improvements—inventions, plans, works of art, literature, music, etc.—come not by leaps and bounds, but by gradual evolution. The father of a great thought can always be traced. The plot of every one of Shakespeare's dramas is taken from another's work. The discovery of the principle of evolution was heralded four hundred years before Wallace and Spencer fully established the theory. The Westinghouse air-brake was the result of the successful transmission of power by compressed air at the Mont Cevis tunnel. Westinghouse merely developed the idea. Human beings are almost powerless to free themselves from the shackles of Public Opinion, taken in the broadest sense. The one, the other, a third and his brother—they are much alike. One man makes a start, another takes it up, improves it and hands it over to a third, a fourth, a fifth or a sixth, who finally reaps the reward.

We believe that a remedy for the retail mail order evil will be discovered, if it is discovered at all, in much the same manner. No immediate panacea is to be expected. The favor of farmers all over the country has been secured by these concerns. Moreover, a certain, definite policy will have to be determined upon by the retailers and this policy must be practical and effective. The retailers must act unitedly; they much act enthusiastically. They are far from this state of mind at present. The prospects for their arriving at it are slim, but not impossible.

In the first place, they should determine accurately the exact conditions to be met. They should determine the exact, uncolored, impartial reasons why farmers in many cases trade with the mail order houses and not with the local dealers. Next to being able to see ourselves as others see us may be counted the somewhat unusual faculty of seeing ourselves as we are. The retailer should not allow himself to be dissuaded from believing and meeting actual conditions by designing, obsequious agitators and trade papers. At the present time, the retail mail order houses are offering to consumers many advantages which the local dealers do not and cannot offer. To offset these advantages, the retailers must meet conditions squarely. They must read the farmer's heart correctly.

It has been left to W. H. Gentner of Farmington, Iowa, to deal a square blow at the "local institution fallacy"—at the fallacy of urging farmers not to build up alien at the expense of local institutions. Mr. Gentner says:

Can we expect the public to buy from the local retailer at a higher price than the same article can be bought elsewhere? Not unless we have power to reverse human nature. Don't you see the inconsistency and futility of trying to educate the public through the local newspapers or otherwise, to buy at home upon the pretext of supporting home interests, etc. This would be easy and logical if all things were equal, but never will any plan work by which you try to force the public to accept inferior service in lieu of the better—it is as unreasonable as to ask a traveler to put up at a one dollar a day hotel and pay two dollars a day for the service in a town where he can secure two dollar a day service, simply to aid the one dollar a day hotel. It's the fellow that is in the way and sees that he is in danger of being swept away by the procession of progress, the middle man, who advocates such unnatural theories.

To supplement Mr. Gentner's statement of facts is perhaps unnecessary. It might be permissible, however, to add that business is business. It is too much to expect any man, hard-worked to support himself and his family, to give much and often to *charity*. Charity is what the retailer, who offers high prices and "local institutions" against low prices and "alien institutions," is asking. We are not addressing those enterprising retailers who recognize conditions as they are, who do not ask for charity and whose prices speak for themselves. For the one farmer who will give charity, there are ten or a hundred who will send to the retail mail houses. The ratio may be changed or reversed by the issuance of a circular or other advertising matter. The change will not be *permanent*. There are mortals who are hard-hearted enough to believe that they ought to buy from that house that offers the best value for the least money. There seems to be no tendency for this class of people to die out.

Mr. Gentner is a general merchant. He has been in business constantly at Farmington for the last twenty years. His business ability is well proved by his local success. Mr. Gentner's opinions regarding mail order competition are derived from a three years' study and struggle to eliminate the evil. The methods to be pursued in downing these competing houses and a short digest of the situation, including the article quoted above, are outlined in an article by Mr. Gentner, entitled "Mail Order Houses; the Present Situation and the Solution," now being widely distributed in Iowa. Regarding the solution end of the question, we quote as follows:

The waste is occasioned by middle men, through whose hands the merchandise passes on its way to the local retailer. These are the causes responsible for mail order house methods. The mail order man saw this and has taken pains to teach these facts to the general public, which has created consternation in the vast field of mercantile activities all over this resourceful country. This waste in the cost of the merchandise to the local retailer is what enables the mail order man to under sell the local dealer. He buys immense quantities and thereby saves a large per cent of the waste occasioned by the present method of the local dealer.

So great is this waste that the mail order man is enabled to quote prices so much below local dealers' prices that the public is not only allured into buying by mail from these mail order houses, but has become so suspicious of the local merchant that they doubt his every transaction. In addition to all these advantages nearly all the large jobbing houses in Chicago co-operate with and favor these mail order houses. These are facts, and the situation is hourly growing worse and worse for the local retailer. The mail order business is spreading and expanding its field of activities day by day, while the local dealers' volume of business is narrowing down in like proportion. * * *

The signs of the age are combination and concentration by which competition is controlled and waste is eliminated. By association of forces, victory awaits us. In no other way, by no single handed method can we ever hope to eliminate this waste which is proving to be the mail order man's fort and the means of our defeat. In the twelve states nearest Chicago there are over 400,000 retailers; ten per cent of this number equals 40,000. If each of these 40,000 were willing to subscribe two shares of $100 each share in a corporation to be by them organized, this would give them

$8,000,000 capital to start with. Let these subscribers pay for such shares of stock in installments, if they prefer, in payments of say $50 per month or even smaller payments. Establish a WHOLESALE-RETAIL establishment in Chicago, issue catalogues which illustrate the merchandise and quote therein the retail price. See to it that in every instance the prices are as low, or lower when advisable, than any other concern quotes doing business in the United States or Canada. Furnish each member with as many copies of these catalogues from time to time as he wishes, requiring cash to accompany order to cover actual cost of such catalogue f. o. b. Chicago; also furnish each member a discount sheet showing cost of goods to him. Each member to supply his customers with a copy of such catalogue, also keep a convenient supply in his store and laid open upon his counters where every person coming into his store can have access to same. A new catalogue should be gotten out as often as is necessary. Fill orders from such catalogue whenever you fail to effect sales from your stock. Often such orders can come with other goods you may be ordering for stock the same week, but in any event deliver such goods free of freight or express and you have the mail order method laid on the table. If you would meet a competitor you must, at least, render as good service as does he, and if you wish to defeat him you must go him one better, which would be easy with the purchasing power of such a gigantic association of forces back of you.

We have expressed admiration over Mr. Gentner's diagnosis of the situation. It seems, however, that his business acumen and judgment were exhausted in the first half of the battle. The method proposed for the solution is hare-brained.

While we are not disposed to balk at an enterprise because it is too grand and far-reaching for our limited comprehension, we believe that we may be pardoned the transgression if we ask in cold blood how Mr. Gentner or any other man or men can hope to get 40,000 contributions of $200. Figuring at the rate of two letters to each prospective stockholder, the postage for the introductory letter alone would amount to $16,000. Follow-up letters would easily bring a total of approximately $50,000, to be paid out of the treasury of the contemplated syndicate. We doubt whether Mr. Gentner himself, or even a band of faithful disciples could withstand the demands of Uncle Sam. Likewise, we trust that neither he nor they would advocate parcels post rate legislation for first class mail. But even supposing that Mr. Gentner were capable of furnishing the wherewithal for the mere beginning of this immense undertaking, a skeptic might be disposed to ask who is to supply the weekly envelope to the vast army of stenographers, bookkeepers, correspondents, etc., absolutely necessary before the enterprise is even launched. Then again, care would have to be taken not to awaken the anger of the male population of surrounding municipalities by depleting these districts of the fairer half of the population to be deported to Farmington for clerical duties. In case the scheme is pushed, we would stem this devastation by the establishment of a "stenographers' farm" somewhere near Farmington to supply the demand. We will not believe that Mr. Gentner would consciously cause a war similar to that occasioned of old by the rape of the Sabine women.

However, admitting that all things are possible and assuming that 40,000 retailers could be persuaded to contribute $200 each, assuming that a corporation was established, a building erected and the output of mills contracted for—how would the subscriber to the stock be bettered? There would be a gigantic business enterprise about as large as the largest retail catalogue house. With 40,000 subscribers the stock would be $8,000,000. Assuming, if possible, that these 40,000 stockholders would vote as one man, would support the board of directors, assuming that of these stockholders an efficient, capable manager be found, and again, assuming that this house was conducted on a paying basis, according to the ideals now voiced by its advocate—what is gained?—a mere jobbing house—the very thing Mr. Gentner condemns so sharply. So far as we can see, the only difference lies in the fact that the stockholders would be retailers instead of the managers themselves. The stockholders would be many instead of few. Better by far if the possible subscribers to this phantom enterprise would buy of the stock of some *present* jobbing house.

The low prices to be charged the retailers who would patronize the future house savor too much of the impossible. The house could not offer better values than present business organizations. At least one *hardware* jobbing house of the present day is larger than the prospective *general* merchandise house. Marshall Field & Co. could not be bought out for $50,000,000. The mutual concern could not obtain better prices from manufacturers. The middleman's profit would be saved to the retailer, it is true. It would come in the nature of a dividend or in lower charges for goods purchased, but in either case it would be merely *interest on an investment.* The interest might be large, it might be small. That would depend upon the manner in which the business was conducted. The chances are that the farce of having an army direct the general instead of a general the army, would result in prices far and away above the regular prices and no interest to the stockholders.

Other objections, both many and vital, could be urged against the scheme. It seems, however, that the plan has gained much favor, that there is danger of a popular rising in its support. It should be condemned as the creation of hysteric enthusiasm.

The situation of the legitimate retailer in respect to the retail mail order house has, however, been analyzed most correctly by Mr. Gentner. He is capable of affording hardware dealers valuable assistance in fighting the battle. He realizes that mere bluster, mere vituperation, clamors for sympathy, for supposed justice, are ineffective. He has sown the seed of improvement. He has laid down certain firm premises upon which all successful future efforts must be based. Though he himself is unable to reap the reward for the regulation of mail order competition, there is no reason why other minds cannot carry on the work to a successful completion. It is needless to say that for the most part, the present officers of the hardware associations are most capable. It is needless to say that the hardware associations have been more effective in curbing retail mail order competition than organizations in other trades. It is needless to say, however, that the best results are to be obtained by utilizing the best that is offered by all parties concerned. The ability to do well oneself is exceeded by the ability to take advantage of the good things offered by others.

News Siftings

MEETINGS.

National Hardware Association—Washington, D. C., November 8, 9, 10.

American Hardware Manufacturers' Association—Washington, D. C., Nov. 8, 9, 10. Headquarters, The New Willard.

The Manhattan Stove Co. is a new concern, capitalized at $100,000, to conduct a foundry for the manufacture of stoves and furnaces at Philadelphia.

The W. H. Sweeney Mfg. Co., of Brooklyn, announce with deep regret the sudden death of their representative, W. H. Vernon, which occurred at Biddeford, Me., on September 14th. Mr. Vernon's sterling qualities commanded the respect and admiration of all who knew him. His host of friends throughout the country will join in lamenting the loss of an efficient, upright man.

The Wayne Stove Company, Seidel Block, Fort Wayne, Ind., have concluded not to build a plant this year, but will have their stoves, just patented, manufactured on contract. The patterns were built by the Quincy Stove Pattern Company of Quincy, Ill. Bids are being received for the manufacture of the stoves under contract and it is expected that the deal will be closed in the very near future. The company hopes to get some stoves on the market before the cold weather sets in.

The Born Steel Range Co., Cleveland, Ohio, announce that on account of the shape and thickness of the bottom of the removable oven used with the Born steel range, it is proof against warping, cracking and burning out. This bottom is so clamped and braced in position as to be easily taken out at any time without damage to other parts of the range. The sides and top of the oven are made from a single plate of heavy steel, flanged and riveted between the walls of the range. It is said to be dust and gas tight.

The Nickel Plate Stove Polish Company, Chicago, are meeting with a remarkable run on their Black Kid stove polish. The reward of four stoves to aggregate $100.00 for one 5-pound can of stove polish better and blacker than the Black Kid stove polish has represented the latter in a most favorable light. The offer to send a free sample to dealers upon request has brought many responses. Black Kid stove polish has been on the market for some years and is well known throughout the trade as a most efficient help in selling stoves.

The Pittsburgh Stove & Range Co., of Pittsburgh, announce that Pittsburgh is famous for its Cannon stoves and that the Pittsburgh Stove & Range Co. have increased the prestige. While it is said that most Cannon stoves are simply a mass of iron, the products of the Pittsburgh Stove & Range Co. are said to have heating and economical features entirely singular. Pittsburgh Cannon stoves have auxiliary hanging inner fire pots. These are said to give an efficient air blast at the base of the fire, thus increasing the heating power and providing for durability. Their Monarch and Chieftain stoves are fitted with an inner cone radiator. This draws air from the room and superheats it before discharging it over the top of the fire. These stoves are made in more than a dozen styles and in a variety of sizes.

The Kramer Bros. Foundry Co., of Dayton, Ohio, claim to be the largest manufacturers of stove carriers in the United States. The Karryall Stove Karrier is made of heavy harness leather. It is guaranteed to carry any style stove or range made. The Gem adjustable stove carrier can be adjusted from twelve to twenty-four inches. The castings are made of malleable iron. The Dayton stove carrier is said to be cheap, durable and simple. There are 100,000 pairs in use, it is claimed. These carriers are for sale by all jobbers.

The Toledo Stove & Range Co., of Toledo, Ohio, sent us a leaflet recently published, illustrating the various repairs constantly carried in stock to be used in the reconstruction of the stoves and ranges included in the Gem line. All of the additional parts for each of the stoves and ranges manufactured by this company are shown properly grouped so as to differentiate the different styles and kinds. The leaflet makes the ordering of repairs convenient and should be in the possession of every dealer handling Gem stoves and ranges.

A special meeting of the Stove Salesmen's Association of Pennsylvania was held at Philadelphia on September 8th. At this meeting it was decided to hold a theatrical benefit at the Chestnut Street Theater, Philadelphia, November 13, 14, 15, 16 and 20. The proceeds from this benefit will go to the treasury of the association. The attraction is McIntyre & Heath in the "Ham Tree," an interesting play. Tickets of admission will cost 75 cents, $1.00 and $1.50. W. T. Hallowell, 111 N. Second St., Philadelphia, is a member of the committee of arrangements.

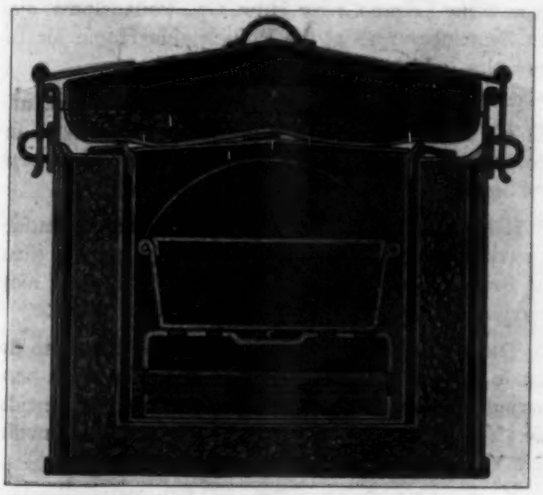
The Globe hot blast is one of the famous stoves manufactured by the Globe Stove & Range Company, of Kokomo, Ind. It is a powerful and clean heater, said to be quite economical. As meritorious features, the makers point to the facts that there are no flues to unstop, no pipes to be cleaned out, and that the stove emits a uniform heat at all times. It is said to hold fire without attention for from twenty-four to forty-eight hours. Slack and soft coal screenings can, it is claimed, be used with the same convenience and pleasing results as have heretofore been obtained from hard coal only.

J. L. Bayard, Jr., the receiver for the Star Shovel & Range Co., of Vincennes, Ind., announces a receiver's sale of the property and assets of this defunct organization. On the 8th day of November, 1905, between 9 a. m. and 4 p. m., the real estate, manufacturing plant, fixtures and the personal property of this company, consisting of shovels, stoves and other articles used in the manufacturing of these products, will be offered for sale. The sale will be held at the plant of the company at the corner of 11th and Nicholas Sts., Vincennes, Ind. All sales will be for cash and the real estate will not be sold for less than two-thirds of its appraised value. This sale is the result of an order issued by the circuit court of Knox county.

A FIRELESS COOKER.

Some time ago mention was made in our editorial columns of a new method for completing the process of cooking without the use of artificial fuel. A non-conducting material was used for retaining the heat within the product to be cooked and the rest of the process was left to nature.

A new method for cooking by retained heat has recently been invented by Felix Kahn, of New York City. The patents on this invention have been assigned to James S. McCoy, 1122 Broadway, New York. In the process of cooking as heretofore practiced, there is necessarily a great waste of heat, care and attention. There is also a loss of food material and also an unnecessary amount of wear and tear on the cooking utensils. It is said that the new fireless cooker invented by Mr. Kahn will save from seventy to eighty per cent of the heat now considered necessary for the cooking of food. There is also said to be a great saving in the cooking utensils which at



A Fireless Cooker.

present are subjected to a longer period of heating than necessary.

This invention is said to be an improvement over the one mentioned in our editorials of recent dates, wherein the food was merely kept in a hot condition. Mr. Kahn discovered after further experiment that after having first permeated food with heat at a cooking temperature, it was possible to stew or boil the food to perfection by the heat as conserved against loss by radiation. He found that it was physically impossible, however, to steam or dry cook by retained heat without placing in the cooker a body of water.

In the improved device shown in the accompanying illustration, a body of water is placed in the bottom of the cooking receptacle and a perforated rest is provided over the water. This rest supports the pan or secondary cooking receptacle containing the food. The apparatus consists of an outer casing of metal and an inner casing of heavy steel; between these are non-conductors. A tight-fitting lid is provided. The whole outer shell is so constructed as to admit of a minimum amount of radiation from the interior.

The food is prepared in the usual manner, and it is allowed to remain on the fire until it is thoroughly permeated with heat. It is then set into the heat-retaining part of the fireless cooker. It is said that this cooker has been thoroughly tested in a number of instances and has always worked very satisfactorily.

COMRADE LEADER.

The Comrade Leader is a portable air tight heater for school houses, lodge rooms, churches, stores, saloons, factories or residences, manufactured by the A. T. Nye & Son Co., Marietta, Ohio. In the construction of this stove the principle of using steel jackets for direct radiating surface has been discarded. The manufacturers feel that these jackets not only burn or rust out quickly, but that stoves containing them radiate heat only when the draft registers are open and the fuel is being consumed. In the Comrade all the direct radiating parts are made of heavy cast iron. With this material exposed to the fire, it is said, that the Comrade will not only make and radiate more heat with a like amount of fuel, but will outlast a steel jacket stove even though the stove is worked harder.

Removable Covers.

Air Tight Putty Joint.

The stove is shipped in three packages. The base and the firepot are detached and the entire portion of the stove above the firepot is mounted and shipped in one package. By the use of the fireproof putty joint shown in the accompanying illustration these separate joints can, it is said, be made air tight. It is claimed that the flanges on these joints are made so that they will hold the cement firmly in place allowing the expansion and contraction of the different sections.

For heating upper or adjoining rooms four seven-inch hot air pipes may be attached to the top of the stove by removing the flanged covers, shown in the first cut. Five four-inch screw registers placed at the base of the twenty-gauge Wellsville polished steel drum, which surrounds the cast iron hot air chamber, supply and regulate the air necessary for the heating of the additional rooms.

Interesting details regarding the construction of this stove will be furnished by the manufacturers, A. T. Nye & Son Co., Marietta, Ohio, upon request. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

The Richmond Shovel & Tool Co., of Richmond, Ind., have filed a notice of dissolution.

The Hardware Record.

American Hardware Mnfs. Assn.
Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres., C. W. Asbury, Philadelphia, Pa.; Geo. W. Corbin, New Britain, Conn.: Henry B. Lupton, Pittsburgh, Pa.
Sec.-Treas., F. D. Mitchell, 309 Broadway, New York.
Ex. Com., W. M. Taussig, New York; Sam'l Disston, Philadelphia; Wm. H. Hays, Pittsburgh; John E. Harbster, Reading; Geo. P. Hart, New Britain; W. M. Pratt, Greenfield, Mass.; E. G. Buckwell, Cleveland: E. B. Pike, Pike, N. H.

Arkansas Retail Hdw. Dealers' Assn
Pres., T. B. Stewart, Newport.
1st V.-P., R. P. Allen, Van Buren.
2d V.-P., W. E. Dean, Portland.
Sec.-Treas., C. E. Taylor, Little Rock.
Ex. Com. (till June, 1907), Hamp Williams, Hot Springs; R. F. Rays, Russelleville; J. P. Simpson, Malvern; J. R. Mott, Helena; (till June, 1906), Frank B. Gregg, Little Rock; C. T. Rosenthal, Batesville· M. Pittman, Prescott.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., W. B. Costello.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

Illinois Retail Hdw. Dealers' Assn.
Pres., Frank B. McKenney, Rockford.
V.-P., F. Giessing, E. St. Louis.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Frank B. McKenney, Rockford. L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Chas. Johnson, Peoria; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia; L. D. Ray, Belvidere; W. T. Gormley, Chicago.

Indian Territory Retail Hdw. Assn.
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

Indiana Retail Hdw. Dealers' Assn.
Pres., A. N. Shidler, South Bend.
1st V.-P., Chas. Frame, North Manchester.
2nd V.-P., Walter B. Creed, New Albany.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland

The Inland Empire Implement and Hardware Dealers' Association.
Pres., C. L. Butterfield, Moscow, Idaho.
1st V.-P., E. E. Lucas, Davenport, Wash.
2d V.-P., Dana Child, Spokane, Wash.
Sec., E. W. Evenson, Spokane, Wash.
Treas., J. A. Fridaker, Spokane, Wash.

Iowa Retail Hdw. Dealers' Assn.
Pres., H. S. Vincent, Ft. Dodge.
V.-P., C. E. Haas, LeMars.
Sec.-Treas., A. R. Sale, Mason City.
Directors, T. A. Nichols, Burlington; D. S. Stouffer, Iowa City; E. C. Moore, Waverly; S. R. Mills, Mason City; U. S. Johnston, Tama; R. J. Breckenridge; Brooklyn; L. C. Clifford, Des Moines; F. P. Bollinger, Alton; W. J. Langfitt, Harlan.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C Frederick, Owensboro.
1st V.-P., U. S. Shacklett, Fulton.
2nd V.-P., George W. Buck, Louisville.
Treas., J. Steitler, Owensboro.
Sec., John R. Sower, Frankfort.

Michigan Hardware Association.
Pres., J. H. Whitney, Merrill.
V.-P., E. B. Standart, Holland.
Treas., Henry C. Weber, Detroit.
Sec., Austin J. Scott, Marine City.
Ex-Com., S. Winchester, Jackson; J. G. Patterson, Detroit; E B. Standart, Holland; E. S. Roe, Buchanan: John Popp, Saginaw; J. B. Sperry, Port Huron; C. M. Alden, Grand Rapids; J. H. Murray, Cadillac; George P. Griffin, Albion; T. Frank Ireland, Belding.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester.
V.-P., H. R. Schroeder, St. Paul.
Sec., M. S. Matthews, Minneapolis.
Treas., G. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; F. W. Lucas, Litchfield; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evenson, St Peter.

Missouri Retail Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., Wm. H. Hahn, St. Louis.
Sec.-Treas., Frederick Neudorff, St. Joseph.
Ex. Com., F. A. Kannsteiner, St. Louis; W. C. Shoop, Richmond; O. W. Johnston, Marshall.

National Hardware Association.
Pres., S. A. Bigelow, Boston.
Vice-Pres., John C. Koch, Milwaukee.
2nd Vice-Pres., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., R. M. Dudley, Nashville; W. S. Wright, Omaha; W. D. Taylor, Cleveland; F. Barker, Elmira, N. Y; J. D. Moore, Birmingham, Ala; P. E. Strauss, Boston.

National Retail Hdw. Association.
Pres., W. P. Bogardus, Mt. Vernon, Ohio.
1st V.-P., E. M. Bush, Evansville, Ind.
2d V.-P., H. F. Emery, Fargo, N.D.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; S. R. Miles, Mason City, Ia.; A. H. Abbe, New Britain, Conn.; Frank A. Bare, Mansfield, O; C. H. Williams, Streator, Ill.

Nebraska Retail Hdw. Dealers' Asn.
Pres., Max Uhlig, Holdrege.
1st V.-P., Albert Degner, Norfolk
2d V.-P., Frank Haecker, Friend.
3d V.-P., M. A. Hargleroad, Holstein.
Sec., J. Frank Barr, Lincoln.
Treas., H. J. Hall, Lincoln.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. F. Emery, Fargo.
1st V. P., Martin Jacobson, Minot.
2d V.-P., H. H. Walters, Casselton.
3rd V.-P., O. I. Butler.
Sec., C. N. Barnes, Grand Forks.
Treas., H. T. Helgesen Milton.
Members Ex. Com., W. R. McIntosh, Bottineau; E. E. Elliott, Sanborn; W. H. Pinkerton, Lakota.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., A. L. Shearer, Dayton.
Treas., L. F. Stahler, Waverly.
Ex. Com., John Kramer, Dayton; C. W. Jewell, Utica; W. S Perry, Zanesville; Frank W. Ingalls, Byran Will M. Crumrine, Salem; A. Boebinger, Cincinnati; John Spoerl, Hamilton; W. F. Jacobs, Youngstown.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. V. Thompson, Mt. Jewett.
V.-P., J. H. Bowers, Charleroi.
Sec.-Treas., J. E. Digby, McKees Rocks.
Ex. Com., Joseph M. Selheimer, Lewistown; J. E. Digby, Mckees Rocks; Geo. V. Thompson, Mt. Jewett; Pa.; Geo. L. Moore, Brownsville.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., F. B. Dunlap, Ft. Smith, Ark.
1st V.-P., J. S. Warren Memphis, Tenn.
2d V.-P., Frank S. Gray, Jacksonville, Fla.
Sec.-Treas., C. B. Carter, Knoxville, Tenn.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin, Honey Grove.
Secy. & Treas., J. W. McManus: Waxahachie.
1st V.-P., R. L. Penick, Stamford.
Dir.: T. T. Clark, Ennis; H. S Allen, Calvert; W. A. Spangler, Bonham; D. B. McCall, Waxahachie; W. M. Gunnel, Charles Hutchins, Sam Marcos.

Wisconsin Hdw. Dealers' Assn.
Pres., Ralph Burtis, Oshkosh.
V.-P., E. Tietgen, Manitowoc.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; Jas. Murphy, Racine: H. J. Krueger, Neenah.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 47 inclusive.

The Odell Hdw. Co., of Greensboro, N. C., are about to begin the erection of a large brick warehouse to take care of their rapidly growing business.

James Hambly and Edna K. Elsheimer, of Buffalo, N. Y., are the incorporators of the Niagara Specialty Co., capitalized at $50,000 to manufacture potato peelers.

E. C. Atkins & Company, Inc., Indianapolis, Ind., and elsewhere, have been authorized to carry on business in Ontario, Canada, with a capital stock of not more than $40,000.

The North Wayne Tool Co., North Wayne, Me., whose factory was recently destroyed by fire, will soon begin the erection of a new plant for the manufacture of their line of edge tools.

John Logan Boyd, formerly connected with what is now the Logan-Gregg Hdw. Co., Philadelphia, died on September 14th at the Philadelphia Home for Incurables, which he entered last April.

F. G. Dean, of Chettenham, Pa., is president and C. H. Tolman is treasurer of Dean & Company, Incorporated, Portland, Me., incorporated with a capital stock of $25,000 to manufacture hardware.

It is said that John H. Sessions & Sons, manufacturers of trunk hardware, will shortly erect a plant at Bristol, Conn. The new buildings will be of most modern construction and will cost about $60,000.

The Reynolds & Myers Co., who are known to the trade as the manufacturers of the Sherwood mop wringer, have sold their business, located at Oneida, N. Y., to the White Wringer Co., of Fultonville, N. Y.

R. R. Shuman, for the last two years Western editor for The Iron Age and The Metal Worker, has started in the advertising business on his own account in the Old Colony Building, Chicago. Mr. Shuman made many friends in his former capacity.

The new wholesale warehouse of the Northern Hdw. Co., Menominee, Mich., was robbed recently. An entrance was gained through the transom of a rear door. The thieves stole a large quantity of carpenters' tools and escaped without leaving any clew.

Dr. W. L. Kingsley, T. H. Stryker, G. W. Turney and J. S. Haselton, of Rome, N. Y., and J. B. Long, of Chicago, are the incorporators of a new company formed at Rome with a capital stock of $50,000 for the manufacture of automobile radiators, spiral tubing and other metal specialties.

The sixth annual meeting of the American Federation of Implement and Vehicle Dealers' Associations convened at the Coates House in Kansas City, Mo., on Thursday, Sept. 21st. The different problems pertaining to the implement trade were thoroughly threshed out and a most profitable gathering was held.

C. A. Peck, of Berlin, Wis., announces that, as secretary of the Wisconsin Retail Hardware Association, he is about to issue the official program for

the 11th annual meeting of the Wisconsin Retail Hardware Association. The size will be as usual and approximately one thousand copies will be printed.

The Richmond Cedar Works of Richmond, Va., have decided to manufacture ice cream freezers. This addition to the line will make necessary additional plants and from 100 to 200 more employes. The new freezer will be called the Snow Ball. The Richmond Foundry & Mfg. Co. will make the castings for the freezer.

The Smith & Hemenway Company of New York, the well known manufacturers of cutlery and hardware specialties, announce a heavy demand for their Reversible hog scraper. This scraper is made of stamped steel, galvanized, with a hardwood handle. For quick work on the sides of the hog, the large end of the scraper is used. For the folds of the skin and the head, ears and legs, the scraper is provided with a small end.

George Wostenholm & Son, Ltd., Sheffield, England, have removed their New York branch from 96 Reade St., where they have been since 1898, to 105 Chambers St. This change is a result of an imperative demand for larger quarters. The new place of business will afford room for a better display of the different specialties of this company and also for improved storage. The products of this company have been famous in this country for over fifty years.

The Epworth Gas, Light & Heating Co., of Waterloo, Iowa, call the attention of the trade to their Ideal Epworth acetylene gas generator. This will, it is said, give a most scintillating light at a small expense. It is intended for the personal use of the owner, and can, it is said, be used most economically. It is likewise said to be safer than coal oil, gasolene or electric light. Its cost is said to amount to two-fifths of a cent per hour for twenty-five candle power. The gas is turned on at the burner just as ordinary lighting gas and is said to burn without smoke or odor and with very little heat.

A RESPITE.

Because of the deluge of letters received from retail dealers all over the country, protesting against the recent enactment by Fourth Assistant Postmaster-General De Graw, ordering local postmasters to number the boxes on the rural routes in their vicinity and to deliver mail addressed by number only, the enforcement of the order has been suspended awaiting the approval of Postmaster-General Cortelyou. Mr. Cortelyou is expected to arrive at Washington October 3d. The original order as announced in our last week's issue instructed local postmasters to assign a number to each one of the boxes on each one of the routes leading from their respective postoffices. This part of the order was not objected to. The different houses in a city are numbered in exactly the same way and the new order would doubtless facilitate the delivery of mail matter in the country. Stringent exception was taken, however, to the ruling, making it possible for catalogue houses to deliver their catalogues by addressing them merely to a box number on a certain route, as for instance, Box No. 4, rural route No. 6, Kensington, Illinois. This order was so in accordance with the wishes of the retail mail order houses that it seemed as though the order had emanated from that source.

In response to the suggestions made by THE AMERICAN ARTISAN and other trade papers, retailers in all sections of the country set forth their complaint before Fourth Assistant De Graw, and it was determined to suspend the order subject to the approval of Postmaster-General Cortelyou. The order is as follows:

"Referring to the department's recent order regarding the numbering of rural mail boxes, you are informed that that portion of the order authorizing the delivery by rural carriers of ordinary mail matter of all classes addressed to such boxes by number alone is hereby suspended."

It seems in some sections of the country that agents of the retail mail order houses were already preparing to take advantage of the order. Requests were made to the local postmasters for a list of the number of boxes on each route and the number of routes. In each case, the request was granted. Although not much time remains before the postmaster-general will return to Washington, it is strongly urged that all retailers take up the matter immediately and express their opinions in a letter to be sent to that official. It is probable that further action in the matter will not be taken before October 4th or 5th.

JOINT MEETING.

The Wholesale and Retail Joint Hardware Committee met at the Hotel Jefferson in St. Louis in accordance with the announcement on Monday, September 25th. All the members were present and a great deal of effective work accomplished. Representatives of other hardware and trade organizations throughout the country were present in the hope of unifying the efforts to be directed against retail mail order competition. During the session the office of vice-chairman was created. The well known vice-president of the National Retail Hardware Association, E. M. Bush, of Evansville, Indiana, was elected to that position. The former officers of the association were re-elected in toto. The committees are as follows:

Committee No. 1—Sporting Goods: W. P. Bogardus, chairman; S. R. Miles, W. S. Wright, R. A. Kirk.

Committee No. 2—To Investigate Prices Quoted by Catalogue Houses: M. L. Corey, chairman; R. A. Kirk, E. M. Bush, S. R. Miles, W. S. Wright, C. B. Carter, T. James Fernley.

Committee No 3—To Correspond with Manufacturers and Others Selling to Catalogue Houses: T. James Fernley, chairman; M. L. Corey, R. M. Dudley, C. B. Carter, W. S. Wright, R. A. Kirk, W. P. Bogardus, S. A. Bigelow.

Committee No. 4—To Take Up the Catalogue House Question with Retail Trade: M. L. Corey, chairman; T. Frank Ireland, S. R. Miles.

Committee No. 5—To Take Up Catalogue House Question with Jobbers: T. James Fernley, chairman; R. A. Kirk, W. S. Wright.

Committee No. 6—On Press and Publicity: T. James Fernley, chairman; M. L. Corey, C. B. Carter.

Committee No. 7—To Correspond Through Jobbers with the Retail Trade in the South on the Catalogue House Question: C. B. Carter, chairman; R. M. Dudley, M. L. Corey.

Efforts were made to clearly distinguish between those manufacturers who were favorable to the cause and those who were not. Accordingly at the opening of the session telegrams were sent to different manufacturers requesting an immediate reply to the queston: "Can we expect any relief from demoralization caused by unprofitable prices on your goods now quoted by catalogue houses?" These replies, together with further information to be collected during and after the Washington meeting of the National Hardware Association and the American Hardware Manufacturers' Association will be used in the compilation of a booklet giving in detail the attitude of the different manufacturers and jobbers. Retailers will be asked to use this booklet in purchasing supplies. It is expected that the catalogue house question will be touched upon in more than a passing way at the Washington convention. It is hoped that certain definite information can be obtained at this gathering which will prove of specific value to retail dealers.

The resolutions adopted by the National Retail Hardware Association at the Minneapolis meeting last March were read at this meeting and gratification was expressed over the fact that the retail hardware merchants in the country were advised in the resolutions to show preference to those manufacturers and jobbers who were in sympathy with the movement.

The committee also expressed regret that private brands had obtained a foothold in the catalogue house discussion. Greater co-operation on the part of retailers and jobbers throughout the country was asked and both classes of the trade were asked to join their respective associations. The pamphlet recently distributed by C. B. Carter of the Southern Hardware Jobbers' Association was indorsed. This pamphlet set forth the evils attendant upon retail mail order competition. The source of supply for the hardware offered by the mail order houses was the subject of discussion, the inference being that jobbers were as much responsible as manufacturers. It was determined that the official year of the committee should begin with the first Monday in July of each year. The work of traveling salesmen in eliminating to a great extent the ignorant methods made use of by some dealers in an attempt to overcome the competition of the catalogue houses formed the basis for a resolution advocating even more active co-operation on the part of these knights of the road. Resolutions were also passed expressing pleasure over the interest shown by other trades and the representatives of the other organizations who appeared at the conference. The trade papers of the country were thanked for their co-operation.

An Attractive Float.

The entire meeting was characterized by uniformity of opinion. The methods proposed and the general policy of the body were unanimous. The best of feeling prevailed throughout all discussions.

NO CHANCE FOR KNOCKING.

A circular distributed by the Iowa Hardware Mutual Insurance Association calls attention to the fact that in 1904 the cash rebate paid to policy holders was twenty per cent of the premium. In 1905 the cash rebate was twenty-five per cent. Expirations during 1906 will, it is said, bring thirty per cent or better. During their prosperous career, this company

have saved their patrons more than $4,000 on business written. A cash business is transacted, with no notes, no assessments, and with rebates paid in cash. All the losses accruing to policy holders are paid from cash on hand.

The volume of business written determines largely the size of the rebates paid. Inasmuch as it is to the personal interest of every hardware firm to become a patron of one of the Hardware Mutual Fire Insurance Associations, and inasmuch as the other patrons of these associations are benefited by any increase in the number of policy holders of the same company, efforts to increase the membership are decidedly commendable and seem to be meeting with a worthy success.

S. R. Miles is president of the Iowa Insurance Association and A. R. Sale is secretary. Both of these energetic officers will receive mail addressed to Mason City, Iowa.

The Independent Steel & Wire Co., of Dover, Del., have been incorporated with a capital stock of $250,000.

ATTRACTIVE FLOATS.

At a retail merchants' picnic and parade, held on August 20th, at East St. Louis, Ill., 237 wagons were in line. These wagons were decorated as attractive floats and keen competition resulted from the publication of the fact that very desirable prizes would be offered as rewards for the best appearing.

Atkins Always Ahead.

The accompanying illustrations show a strong display consisting entirely of Atkins hand, butcher, buck and other saws. The trade mark, "Atkins Always Ahead," was formed of hack saw blades. The float atracted a great deal of attention because of its novel and handsome appearance. Great credit was bestowed upon its designer, Richard D'Oench, the veteran manufacturers' agent at St. Louis.

Atkins Always Ahead.

The illustration on the opposite page shows the attractive display, which was awarded the first prize. It will be noted that a great variety of goods are shown without in the least detracting from the central figures. The design could easily be adapted for a hardware window. The designers, the Schaub Hdw. Co., were the recipients of hearty congratulations.

ALMGILL FUND.

The many friends of the late Tom Almgill, formerly connected with the G. & H. Barnett Company, proprietors of the Black Diamond File Works, Philadelphia, will be pleased to learn that the fund for his monument has been collected. Some months ago James D. Green of the Supplee Hdw. Company was authorized by a few of the most intimate friends of the late Mr. Almgill to collect a sum of money to be used for this purpose. Mr. Green announces that he has now fulfilled his mission and has turned over the testimonial to Mrs. Almgill, giving her the list of the donors. The following response was received from Mrs. Almgill:

"I hereby acknowledge receipt of your favor of the 16th, turning over to me a monument to my beloved husband, erected by a few of his intimate friends, as a token of their love and esteem for him.

"Words cannot express my feelings in accepting this token, and I ask you to convey to them my heartfelt thanks for the friendship they had for him, as shown by erecting this beautiful monument to his name and memory."

NO. 602 NAPANOCH.

The accompanying illustration shows the Number 602 Napanoch pocket-knife tool-kit, sold by U. J. Ulery, 7 Warren street, New York City. Any one of the blades shown under the pocket-knife in the accompanying illustration may be attached to the knife at the point shown by the arrow. This operation can, it is said, be performed almost instantaneously by a simple backward wrist movement. It can be detached by a similar operation.

No. 602 Napanoch.

Number 1 shows a leather pocket-book of a convenient size but large enough to contain all the tools shown in the illustration. Number 3 is a reamer; Number 4, a file; Number 5, a saw; Number 6, a chisel, and Number 7, a screw driver.

This tool is made by skilled workmen said to be of the best quality obtainable in America. It is made of good material and sold with an absolute guarantee. U. J. Ulery will be pleased to furnish additional information upon request. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

RETAIL HARDWARE DOINGS.

NEW FIRMS.

Decatur, Texas.—Carpenter & Kendall.

Minot, N. Dak.—Roell Hdw. Co.

Mt. Clemens, Mich.—R. C. Ullrich Hdw. Co.; capital stock, $28,000.

Akron, Ohio.—Harry J. Stickney.

Billings, Mont.—The Western Hdw. Co.

Mammoth Springs, Ark.—The Mammoth Springs Hdw. Co.; capital stock, $25,000. Incorporators—B. F. Elder, T. H. Morris, and R. A. Gregory.

New Bern, N. C.—The Whitford Hdw. Co.; capital stock, $2,500. Incorporators—Harry Whitford, Daniel H. Whitford, and Mrs. Laura E. Williams.

Fort Worth, Texas—Alston Gowdy Hdw. Co.; capital stock, $10,000.

BUSINESS CHANGES.

Grand Island, Neb.—Lederman Bros. succeed A. C. Lederman.

Bradshaw, Neb.—Turner & Cline succeed R. C. Buckley.

Pacific Grove, Col.—Oliver & Lowe, succeed R. S. Stansbury.

Basehor, Kan.—F. M. Darby succeeds Scott & Ellis.

Lyons, Kan.—Taylor & Goffman succeed Blair-Gibson Hdw. Co.

Randolph, Neb.—R. L. Nance succeeds Blenkiron Bros.

Tabor, Neb.—Bloedel & Lewis succeed Mawhor & Cowdy.

Oregon City, Ore.—J. C. Zinser succeeds Fairclough Bros.

Roseburg, Ore.—F. H. Churchill succeeds Churchill & Woolsey.

North Platte, Neb.—Blake Maher succeeds H. M. White.

Connell, Wash.—R. J. Porak is removing from Plaza to Connell.

Malvern, Iowa—W. H. Slayers succeeds A. J. Kronsbein.

New Boston, Texas—J. H. Russell succeeds Russell & Willis.

Alton, Iowa—Haven & Co. succeed F. J. Groff.

Cherokee, Iowa—F. F. Leonard succeeds P. H. Brison.

Western, Neb.—A. D. Seybolt succeeds E. E. Gustin.

New London, Iowa—Walker Bros. succeed Ed M. Lee.

Mullin, Texas—Kemp Bros. succeed Summy & Abscher.

Half Rock, Mo.—L. Sampson succeeds Brittain & Sampson.

Concordia, Kan.—A. Linville succeeds T. St. Pierre.

Lancaster, Ohio—The Martens Hdw. Co. succeed The MacCracken Hdw. & Implement Co.

Brashear, Iowa—Rogers Sol succeeds C. A. Chadwick.

Dunlap, Ill.—George Christopher succeeds Charles Holmes.

Hopkinsville, Ky.—W. A. Pool & Son succeed Jack Meador.

Milton, Iowa—Roy Baker succeeds H. W. Spilliman.

Sterling, Neb.—L. R. & Val Zink succeed Young & Ostrander.

Westmoreland, Kan.—John Collins, discontinued.

Wetumka, I. T.—George H. Putnam succeeds Mrs. I. E. Putnam.

Tecumseh, Nebr.—Bush & Seaver succeed C. S. Campbell.

Carlton, Okla.—C. W. Ashley succeeds F. L. Chronister.

Scribner, Nebr.—C. W. Marquardt succeeds Marquardt & Schoeneck.

Washington, Iowa.—Brus Bros. succeed Mann & Lemley.

MISCELLANEOUS.

Wolfe City, Texas.—The Lacey-Pittsworth Co.; fire; loss, $2,000.

Youngstown, Ohio.—The Morris Hdw. Co.; new addition.

Hartland, Wis.—W. F. Wittenberg; bankruptcy.

Albany, N. Y.—Leo W. Schaefer Hdw. Co.; remodeling building.

Paducah, Ky.—The Michael Bros. Hdw. & Harness store; burglarized.

Texico, Roosevelt County, N. M.—The Guy Gamble Hdw. Co.; destroyed by fire.

Frank B. Sloan & Co.; assigned.

Chenango Forks, Miss.—John W. Kenyon; deceased.

Parkersburg, W. Va.—Chancellor Hdw. Co.; new building.

Hammond, La.—Baltzell & Donaldson; destroyed by fire.

Table Rock, Neb.—A. K. Tillotson; destroyed by fire; loss $2,000.

Plymouth, Mass.—Plymouth Hdw. Co.; remodeled store.

Greensboro, N. C.—R. H. Hardin; bankruptcy.

High Point, N. C.—Siceloff Hdw. & Grocery Co.; remodeled store.

Grand Island, Neb.—R. H. McAllister; fire loss.

Carlow, Mo.—J. B. Drummond; fire loss.

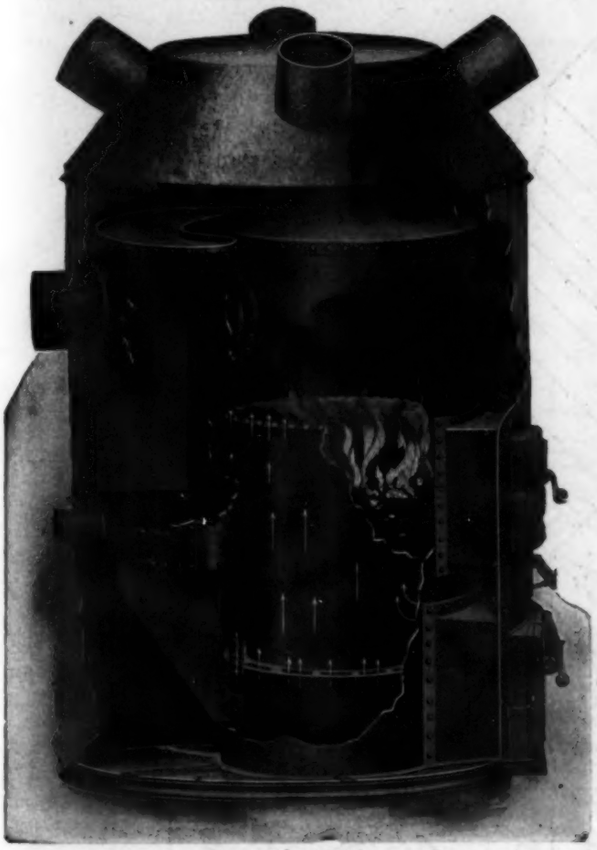
Texico, N. M.—Guy Gamble; fire loss.

Brookville, Kan.—I. N. Sandergaard; fire loss.

THE IMPROVED STEEL PLATE TREMONT.

Following their wisely determined rule to make their products as extensive as possible and yet not so extensive as to make any one of them imperfect, the Pittsburgh Stove & Range Co., of Pittsburgh, Pa., have kept on improving their different lines, and now offer to the trade the improved Tremont steel plate furnace shown in the accompanying illustration. This furnace was built in response to the popular demand which has pervaded a great section of the country. There is little question but what steel plate furnaces are more popular than formerly.

In construction the improved Tremont steel plate furnace is said to be most durable. The plates are of heavy steel, thoroughly decarbonized and of the same



Sectional View.

ductility and same thickness as those used in the construction of steam boilers. The seams are securely riveted and caulked. The combustion chamber is built absolutely straight from top to base rim. This body is made of one piece of steel. The top of this main drum is a heavy convex steel plate flanged over the sides of the drum body.

The Tremont steel plate furnace has a crescent-shaped radiator. This is said to be of large proportions and connected with the body of the furnace by two cast iron collars. These are heavily flanged and secured with heavy bolts and rivets. The accompanying illustration shows the long fire travel.

The fire-pot and the grate are desirable features of this furnace. The former is made of heavy sectional linings of either fire brick or cast iron. These linings reach from the grate frame to a point above the feed door. This is said to prevent the fire from coming into direct contact with the steel body. The grate is of the triplex type. There are four heavy bars triangular in shape. These are set in the grate frame resting on legs bolted to the body of the furnace. Its construction is said to make it impossible for ashes to collect between the fire-pot and the furnace body.

The engineering department of the Pittsburgh Stove & Range Co. will be pleased to furnish plans and specifications and also apparatus for heating and ventilating plants of any size with either the gravity or the mechanical systems. They will also be pleased to send catalogues showing the complete line of the Tremont furnaces. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

FOUR WARM PROPOSITIONS.

As an efficient aid to their agents in selling furnaces, the Union Stove Works, 70 Beekman St., and 66-68 Gold St., New York City, have printed and are willing to distribute an interesting booklet entitled "Four Warm Propositions." These warm propositions are the Astor, Storm King, Commander and Red Cloud hot air furnaces. The battle cry of the users of these furnaces is said to be

"Boisterous winter never enters here,
'Tis glorious spring throughout the year."

The past two winters in the East were especially severe and did great work in eliminating the poorer furnaces and in advertising the better. It is said that the Union Stove Works found these tests of heating ability very profitable. The work of Jack Frost is said to have exposed the worthlessness of many furnaces in the country, bringing into publicity heaters that were able to do satisfactory work.

Among the desirable features mentioned in the booklet, which is addressed to the user are the little dust arising through the registers, the great efficiency of the heater at the expense of ornamental features, freedom from coal gas and simplicity.

A batch of these booklets will be sent to agents upon request. The manufacturers will also be pleased to send other descriptive matter regarding their furnaces. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

PARAGRAPHS.

A. Wilson and Isaac H. Bedford, of Philadelphia, with others, are the incorporators of the American Regenerator Furnace Co., Camden, N. J., capitalized at $25,000 to manufacture furnaces, heaters, stoves and ranges.

"Home Comfort" is the title of a small booklet gotten out by the Barstow Stove Company of Providence, R. I. It is published for the consuming trade and tells why Bay State heaters should be used for heating dwellings.

The Administration des Hospices et Secours, Boulevard du Jardin Botanique, Brussels, invites bids for constructing a control heating and ventilating plant and a warm-water conduit for a new sanatorium which is to be established.

Tinshop

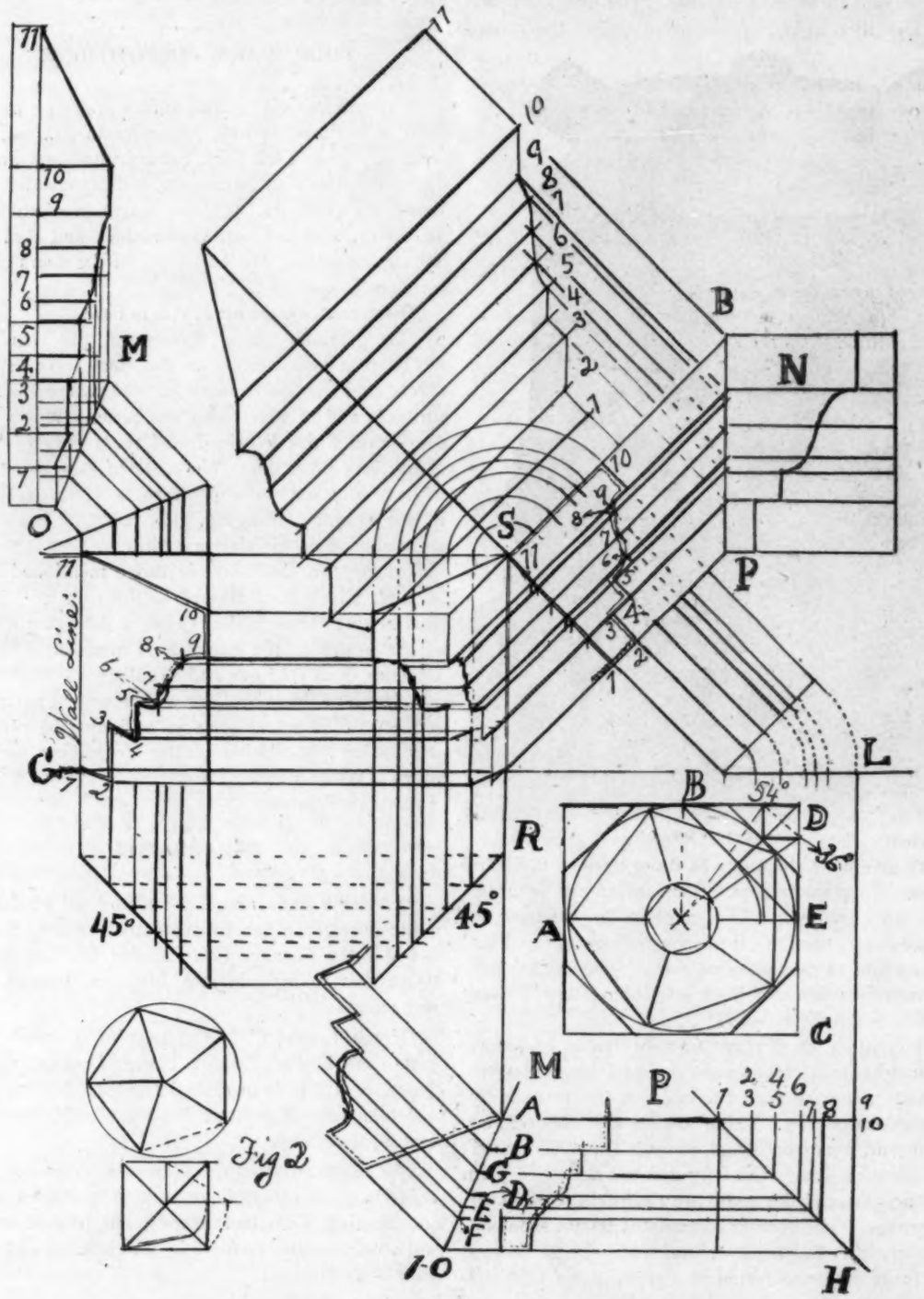
Principles of Intersection.

PART XVIII, PLATE VI.

[Copyright, 1905, by Joseph P. Coleman.]

PATTERNS—OCTAGON RAKING MITERS (BASE OF GABLE), HORIZONTAL MOULD.

From any convenient point on line 11-11 draw the vertical line, number the points 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11; draw horizontals through the points. Establish the octagon cutting miter as shown, OM, by drawing three sides of an octagon. Through the points 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, horizontal mould, draw vertical lines, continued around octagon, as shown, intersecting miter line OM in points. Throughout the points on line OM draw vertical lines intersecting the pattern lines numbered similar, in



points; lines traced through the points give the octagon miter pattern.

The pattern just found is for the horizontal return mould at base of gable. It is to be joined to the other miter pattern, which we are about to find. The pattern is found by measuring the length of each line in gable, from the right section line 1-11 to the points on the surface of the projected view. It is self-evident that two lines, to intersect, must cross each other in a point. The lines through gable cross the horizontal lines, in points on the surface of the required form of the intersection, between the inclined and horizontal moulds.

HOW TO FIND THE PATTERN FOR THE MITER, AT BASE OF GABLE. INCLINED MOULD PROFILE.

Extend the wall line or right section line, as it may be called, 1-11 indefinite. At any convenient point on this line mark a point. From this assumed point space off the distances between the points of division, numbered on the surface of the inclined profile in gable. Those points are numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.

Through the points so spaced draw the inclined lines, which are parallel to pitch of gable. Number the lines as shown. To avoid confusion in the drawing, I did not draw lines joining the points on surface of mould to the pattern lines. You square up from base line of gable mould by using the T-square and 45-degree triangle. Point 11 is on the line 1-11 extended. It crosses pattern line 11 at top of sheet, point 10 on the vertical face of projected mould, crosses point 10 in pattern; draw line joining the points 10-11 in pattern. Point 9 is at the top of the ogee form; it crosses pattern line in pattern sheet. Join 10 to 9 in pattern by drawing a vertical line. Draw the lines from points 8, 7, 6, 5, in ogee, cross 8, 7, 6, 5, in pattern lines. Join the points, giving the ogee form of pattern; draw lines from 4, 3, 2, 1, crossing pattern lines 4, 3, 2, 1. Join the points completing the "Pattern for the base of the Gable Mould." See note.

This pattern joins the octagon miter of the horizontal mould.

PATTERN AT GABLE.

Draw the vertical line PB intersecting the lines drawn through the points of division on the surface of the profile, as shown; mark the points of intersection of lines. Through the points draw perpendicular lines crossing the pattern lines previously numbered. Mark the points where the lines cross. Trace lines through the points in the pattern lines, giving the gable pattern.

Note.—The miter just found is precisely the same as any panel or gable miter. The intersection at base of gable, stated in the simplest terms, is to find the intersection of an inclined mould, and a cutting plane, as shown.

The pattern for the horizontal mould is the regular octagon miter pattern. Cut two pieces of sheet metal, using pattern of the gable mould, base of gable; form right and left, join together. Each mould will incline 45 degrees, octagon angle in plan. An octagon pinnacle mould. The shape of the mould is suitable to be used as a pinnacle mould.

HOW TO FIND PROFILE N (HORIZONTAL MOULD AT TOP OF GABLE).

Draw horizontals through the points on line PB indefinite. PH on plan is a 45-degree cutting line. The points on the line represent the full projection of the gable mould. Draw perpendiculars through the points 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, intersecting the indefinite horizontals previously drawn through PB in points; trace lines through the points, giving Profile N. A view of the horizontal return mould is shown in plan; also a projected view of gable mould.

FIGURE 2.

Draw the square and diagonals as shown. The intersection of diagonals is a point. Through the point of intersection of diagonals draw a vertical and a horizontal line as shown. From the same point, as a center (radius equals one-half of diagonal line), draw an arc intersecting horizontal line previously drawn; from this point of intersection draw the dotted line crossing the vertical line previously drawn, as shown. The dotted line is the length of hip. With the length of the dotted line as a radius, describe a circle, as shown; any side of the square applied as a chord of an arc will divide the circle in 5 equal parts—a regular pentagon. Take away one part, cut out the pattern on a piece of sheet metal, form the corners, to join the edges of the pattern; the base is a square; the ornament is half-pitch.

FIGURE 3.

The illustration shows figure 3 below the ground line. The large square is shown by R, B, D, E, C, M, A. Draw diagonals M-D and R-C. X is the point of intersection of diagonals. Draw diameter AE from X as a center radius E inscribe a circle in the square. Draw line BE. Take radius BE each corner of large square a center, describe four quadrants, cutting each side of large square in two points. Lines joining points will give octagon inside large square. Mark point of intersection where line BE crosses diagonal XD. From X as center, one-half line XD as radius, describe curve cutting diameter AE in a point. Draw a perpendicular intersecting XD and circumference of circle at same point. From this point draw a horizontal intersecting DC side of square in a point. Mark the point .36 degrees. From the same point draw perpendicular intersecting line BD in a point, mark the point 54 degrees. The small square is formed 54 degrees; D, 36 degrees. Draw the lines X-36 degrees and x-54 degrees. The line x-36 degrees intersects circumference of circle in a point. Through this point draw a perpendicular intersecting diameter AE. Extend the line to meet circumference of circle below the diameter AE. This line is one side of a pentagon, as shown; apply the line five times in a circle and draw lines, completing pentagon. Draw lines from verticals of pentagon to X. Draw small circle. Draw small pentagon in circle.

IDEALS REALIZED.

The most improved methods for the manufacture of sheet metal conductor elbows and shoes and a most improved plant in which to conduct their manufacture, has long been the dream of Ferdinand Dieckmann,

proprietor of the well-known firm bearing his name at Cincinnati, Ohio. This dream is now approximately realized in the new gigantic establishment recently erected in that city. The capacity of the new plant is said to be so great as to comfortably handle the entire demand of the United States. Mr. Dieckmann had the following to say in describing the new building:

The work done by our firm in the past 7-8 years in the effort to have the best equipped conductor elbow plant in the United States, if not in the world, is difficult to appreciate. It was all up-hill work and would take volumes to describe it properly in order to do it justice. Every machine we formerly had has been replaced by a new one able to produce more goods and on a more economical basis. All machinery was redesigned to make them most effective and no cost was avoided in this. Thousands were expended in experiments, thousands were expended in equipping the requisite tool room, in which all the necessary parts were made under our guidance and supervision, thousands were expended in equipping the tool room with the necessary gigs and general machine tools to place the room in condition to turn out in short time any machine we may wish to have for our works. As a result we have gradually collected machine tools, special cutters and trimmers in our tool room which makes it a model in this machine ridden city.

The erection of the new factory and warehouse building is but the crowning feature to the outlined work which was begun over seven years ago and which was begun with a knowledge of the fact that the trade would prefer a perfect conductor elbow to any imitation or inferior article on the market, providing of course the perfect elbow could be secured at all times. The new building is but a wing to our former large establishment. In it all the new and rapid machinery have been installed, while ample room has been set aside for storing purpose. The building contains four floors, each floor being 15 feet high. It is erected in the most approved manner, it is absolutely fireproof as no combustible material whatever was used in its construction. The building is designed as an eight story structure and can readily be extended to this height if necessity demand. All walls, pillars, girders and cross beams are of the re-inforced type of concrete construction and calculated to withstand a strain five times that which we at any time will have occasion to place on the same. All floors are made of tile and concrete, re-inforced with the Kahn system of bars. This style of floor gives a flat ceiling to all the floors so that projecting cross beams are not encountered and therefore cannot interfere with the erection of the line shafting. All wires, whether for electric light or power are carried in loricated pipes imbedded in concrete, the windows are very large and in great abundance so that there is a flood of light through the whole structure. The sanitary plumbing is the very latest, while bath rooms are being installed to accommodate all employes. A central heating plant furnishes the requisite warmth in the winter months. An electric elevator communicates with the various floors and all handling is done on the most economical basis. A driveway leads through the ground floor, while the plans have been drawn to allow the placing of a spur in the ground floor from the street as soon as the interurban system has been completed in our city, whereby freight will be handled through the business section of the city by means of electric motors.

The storing capacity of the warehouse is such that we could accommodate every elbow made during an uninterrupted run of six months, without taking one elbow out of the house. Our daily producing capacity is such as to enable us to turn out three times the amount per day we produced a few months ago. Our variety has also been increased to 1,225 different kinds of the regular stock, not counting the heavy gauges, special elbows, incubator goods, long sweep elbows for overhanging roofs or elbows for exhaust purposes. We are now in a position to fill all orders on the day they are received, and it is safe to add that we can handle carload orders with the same ease to-day that we did orders for one hundred dozens a few months ago.

Besides having equipped the new factory and warehouse building we have also equipped an up-to-date office having installed in the same all the latest paraphernalia for the rapid handling of correspondence, notices, invoices, etc., etc. In this office building is also located our chemical and physical laboratory where all raw material is examined as to its quality, so that we run the risk at no time of ruining the quality of our product. The trade can therefore continue calling for our goods knowing that they will get the best money and skill can produce.

NOTES AND QUERIES.

LEFT HAND FIRE BOX.

From Bluford Chambliss, Walnut, Iowa.

Where can I buy a steel range with a left hand fire box?

Ans.—Thomas, Roberts, Stevenson Co., Philadelphia; Gold Coin Stove Co., Troy, N. Y.; Chicago Stove & Range Co., Armour Ave. and 26th St., Chicago; John Kontny, 65-67 N. Desplaines St., Chicago; W. D. Sager, 38 Michigan St., Chicago.

TIN WORK.

From R. J. Schwab & Sons Co., Milwaukee, Wis.

Where can we buy tin work such as is used on common centrifugal cream separators?

Ans.—Stuber & Kuck, Peoria, Ill.; Sturges & Burn Mfg. Co., 249 S. Green St., Chicago; A. H. Barber Creamery Supply Co., 229 S. Water St., Chicago; Sharples Co., 35 South Canal St., Chicago; Creamery Supply Mfg. Co., 205 Kinzie St., Chicago; Smith Bros. Mfg. Co., Indianapolis, Ind.

POCKET KNIVES.

From H. O. Keferstein, Barberton, Ohio.

Kindly give me the names of some good pocket knife manufacturers.

Ans.—American Shear Co., Hotchkissville, Conn.; Challenge Cutlery Corp., Bridgeport, Conn.; Empire Knife Co., Winsted, Conn.; Excelsior Cutlery Co., Thomaston, Conn.; Holley Mfg. Co., Lakeville, Conn.; Humason & Beckley Mfg. Co., New Britain, Conn.; Miller Bros. Cutlery Co., Meriden, Conn.; Neely-Ralya Co., Anderson, Ind.; Northfield Knife Co., Northfield, Conn.; Southington Cutlery Co., Southington, Conn.; Thomaston Knife Co., Reynolds Bridge, Conn.; Waterville Cutlery Co., Walden, N. Y.; R. Wallace Sons Mfg. Co., Wallingford, Conn.

CAN MAKERS' MACHINERY.

From John H. King, Stateline, Wayne county, Miss.

Where can I get can makers' machinery?

Ans.—Adriance Machine Works, Brooklyn, N. Y.; Blake & Johnson, Waterbury, Conn.; Consolidated Press & Tool Co., Chicago; Chas. Leffler & Co., Brooklyn, N. Y.; Niagara Machine & Tool Works, Buffalo, N. Y.

ICE MACHINERY.

From Gray & Bennett, Flandreau, S. D.

Where can I buy ice-making machinery?

Ans.—Vilter Mfg. Co., Milwaukee; Fred W. Wolf Co., 139 Rees St., Chicago; York Mfg. Co., York, Pa.; Allis-Chalmers Co., Milwaukee; Harrisburg Ice Machine Co., Harrisburg, Pa.; Henry Vogt Machine Co., Louisville, Ky.; George S. Grier & Sons, Milford, Del.; Murray Iron Works Co., Burlington, Iowa; Hendrick Mfg. Co., Ltd., Carbondale, Pa.; Spangler

Mfg. Co., York, Pa.; Triumph Electric & Ice Machine Co., Cincinnati.

RUTTAN FURNACE.

From Velde, Roelfs & Co., Pekin, Ill.

Who makes the Ruttan furnace?

Ans.—This furnace was made by the Ruttan Furnace Co., Bloomington, Ill. Repairs are now handled by Lewis & Kitchen, 433 Wabash Ave., Chicago.

TIN PLATE.

From John H. King, Stateline, Wayne county, Miss.

Where can I buy tin plate for use in making cans?

Ans.—Berger Mfg. Co., Canton, O.; J. H. Eller & Co., Canton, O.; Follansbee Bros. Co., Pittsburgh, Pa.; Garry Iron & Steel Co., Cleveland, O.; Illinois Roofing & Supply Co., Chicago, Ill.; Lee-Glass-Andreesen Hdw. Co., Omaha; McClure Co., Philadelphia, Pa.; Merchant & Evans Co., Philadelphia, Pa.; Wheeling Corrugating Co., Wheeling, W. Va.; Wells & Nellegar Co., 72-76 Lake St., Chicago; Canton Steel Roofing Co., Canton, O.; Clark, Quien & Morse, Peoria, Ill.; John McVoy & Co., Chicago.

CAREY ROOFING.

From "Anxious," New York City.

Who makes Carey's roofing?

Ans.—Philip Carey Co., Rockland, Ohio.

ITEMS.

The Art Metal Construction Co., of Jamestown, N. Y., are adding three new buildings to their already extensive plant.

The Lorain Sheet Metal Works, of Lorain, Ohio, have recently started in business, and expect to be in the market very shortly with a one-piece miter.

W. J. Edwards, of Weldon, N. C., has recently started up a tin and sheet iron shop in that city. He will be pleased to receive catalogues for shop tools.

George W. Silson, of Buffalo; E. E. Frutchy and George Kellogg, of Hornellsville, N. Y., are the incorporators of the Buffalo Sheet Metal & Mfg. Co., of Buffalo, recently incorporated, with a capital stock of $25,000.

The Heron Lake Hdw. Company, of Heron Lake, Minn., are a new company recently formed to retail hardware and conduct a tinshop. A. E. Francis, formerly of Hollandale, Wis., and F. W. Garlock are the partners.

Baltimore, Md., is said to be an especially profitable field for sheet metal workers and plumbers this year. Efficient workmen are in demand and there are few responses to the advertisements for sheet metal workers which appear daily in the newspapers.

The Royal Ventilator and Mfg. Co., of Philadelphia, have opened a branch office at 62 and 64 Williams St., New York City. A large number of orders is being received at both the main office, located on Locust St., Philadelphia, and the branch office in New York.

The Centennial rain water cut-off is maintaining the popularity which characterized its introduction to the trade. It is said to be the strongest, most durable and most economical cut-off now on the market. It is made to fit corrugated and plain pipe and can be used without extra pipe or elbows. It is manufactured by Cooney & Gieger, 19-21 East South St., Indianapolis.

The plant of the United Sheet and Tin Plate Co., Marietta, O., has just been completed and is now ready for use. A large amount of money has been spent on improvements. An office has been opened in the Diamond Bank Building, Pittsburg, in charge of D. A. Garden.

The October issue of the Cortright Metal Shingle Advocate brings to the attention of the roofing contractor the fact that the cost of insuring a house covered with Cortright metal roofing is ten per cent less than the cost of insuring a house covered with fragile and combustible substances.

The Capitol Can Co., of Springfield, Ill., are a new concern which will carry on a general stamping business. Re-enforced dust pans and oil cans will be their specialty. W. W. Smith, who formerly operated the W. W. Smith Mfg. Co., of Cincinnati, Ohio, will be at the head of this new organization.

The strike of the New York sheet metal workers, which was started last week and about as suddenly called off, was referred to the board of governors of the Employers' Association. This body forced the workmen to arbitrate the matter, and it was referred to the association's board of arbitration.

The latest catalogue showing machinery for manufacturing pieced tin and black iron ware, built by the E. W. Bliss Co., Brooklyn, N. Y., is worthy of the firm from which it issues. It contains eighty pages with numerous illustrations, is well arranged and classified. This company comprise also the Stiles & Parker Press Co.

C. A. Parsons & Son, 923 Third Ave., Baltimore, Md., who commenced business operations in July, 1904, with a small sheet metal shop in which only the two members of the firm were employed, have increased their working force rapidly since that time and now have fourteen names on the pay roll. The firm have purchased two lots on which they will erect an additional block for the tinning and cornice departments.

The Lisk Mfg. Co., Ltd., of Canandaigua, N. Y., send us a sample of Lisk's Seamless Self-Basting roaster, a specialty which they have just introduced. This roasting pan is said to revolutionize an important branch of the culinary art by permitting the use of natural juices in the cooking of all meats, thus retaining their original sweetness and flavor. Steam from the meat arises in this pan to the top. The top is convex, sloping toward the middle. It retains the moisture and returns it to the roast, thus rendering entirely unnecessary, it is said, the constant care and attention and the use of water required by the older style. The manufacturers claim that the pan will save one-half the labor of cooking and twenty per cent in the weight of the meat. This roaster is made of Lisk's Imperial Gray enamel steel ware, warranted for ten years. The manufacturers will be pleased to furnish one of their descriptive booklets upon request. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

Trade Report.

IRON AND STEEL MARKETS.

At a meeting of the officials of the United States Steel Corporation held in New York City on September 20th it was unanimously conceded that the steel business was never before in a more prosperous condition and that the outlook for the ensuing year could not be improved. A representative of the Illinois Steel Company asserted in an interview that the mills and plants of his branch were so overwhelmed with orders for all classes of finished steel that they would undoubtedly fall short by 100,000 tons in attempting to fulfill obligations. This shortage will ensue in spite of the fact that the company has broken all records in production. A similar congestion of orders is to be found in all the mills of the steel corporation although the total production for the entire year will be the largest ever recorded. It has been said that the steel rail mills of the country could sell their entire 1906 capacity if they were disposed to do so. In view, however, of the immense tonnage now on hand mills are content to book only those orders which they are confident they will be able to fill. There is little question but what if weather conditions continue good and no serious shortage of cars is encountered, the Steel Corporation will be able to declare the same generous dividend for the fourth quarter as for the third. The dividends which would ordinarily go to the common stockholders will be used for improvements in all likelihood.

The railroads continue to buy heavily of steel rails and fully 125 tons were booked during the week ending September 27. The Northern Pacific Railroad bought 30,000, the Rock Island 40,000, while the New York Central placed a large unannounced tonnage. The total rail orders booked for next year, including the orders that cannot be filled during 1905 now amount to approximately two million tons. The demands of Western railroads have outgrown the producing capacity of the local mill. Plans have been made to increase the capacity, but have not yet been completed.

The heavy buying of pig iron culminated during the week under review in the withdrawal from the market of the Sloss-Sheffield Steel & Iron Co., and the Tennessee Coal & Iron Co. These big furnaces, together with other smaller stacks have sold their entire output for the balance of the year and also their entire stock on hand. Only the cheaper grades are to be obtained from these companies. The largest sale noted during the week was for five thousand tons purchased by a Michigan foundry. This was made up of both Northern and Southern grades. Prices on Southern iron have been raised officially 50c a ton and are now quoted at from $15.65 to $16.15 for Number 2 foundry, Chicago. Practically all deals closed during the week were made, however, on a basis of $12.00, Birmingham. A slight advance was noted in Northern iron but prices still range between $16.50 and $17.00 for Number 2 foundry. Sales during the week were made up of small lots for the most part although an aggregate tonnage of about seventy-five thousand tons was recorded. While there is little excitement in the local market, great concern is expressed over a possible car shortage. It is feared that with the beginning of the cold weather there will be a car famine similar to that experienced three years ago.

Iron bars have been advanced $1.00 a ton and prices are firmly held by some mills at 1.70c, Chicago. Supplies can be obtained from other mills, however, at the rate of 1.65c. It is doubtful whether this lower rate will be obtainable for any long period of time. Both new business and specifications on old orders continue heavy. Larger sizes on steel bars are scarce and mills predict an advance of $2.00 a ton. Specifications on steel bars were never better.

PIG IRON.

Matthew Addy & Company, iron merchants, will say in their weekly report:

As a result of the perfect flood of orders which have been pouring in upon the furnaces for the past two weeks, prices have sharply advanced, so that to-day 2 foundry is firm at $12.50 Birmingham, with $13 asked for forward shipment, while 2 foundry Ohio iron is $15 at the furnace. This buying movement has been one of tremendous volume. Most of the furnace companies have had every ton of iron they can make for this year taken up, and a considerable percentage of their make for the first quarter, and in some instances the first half of 1906, is under contract. Higher quotations instead of checking the buying acted as a stimulant, and apparently have given it renewed vigor. It is useless to try and go into details of what has been bought, for as a matter of fact the buying has been of the most general character, and everything that the furnaces have had to offer has been eagerly taken. The situation of the iron trade is one of very great interest. There are many who predict that before the winter is over it will be impossible to obtain pig iron for love or money. They regard the situation as somewhat analogous to that of the boom three years ago. Others more conservative are inclined to not take this view of the case, but think that we are going to have a gradually growing market with gradually increasing prices. They point out the fact that consumption has been growing larger for some time, and that the prosperous condition of the country and the growing demand for goods for export warrant the belief that it will still grow; whereas production is now at its limit, and is rapadily approaching the season when by reason of adverse weather it will necessarily be reduced. Then again, there is a small minority of old time croakers who believe (or at least profess to believe) that the good times are now at their maximum and that we are bound to have a collapse shortly. This last opinion is held by so few as to scarcely be worthy of the name of minority.

The general sentiment in the trade is one of extreme optimism. Order books of producers and consumers are filled solidly for months ahead, and beyond that are fairly well filled. Prospects of future business are all that could be desired, and as far as the pig iron market is concerned not a cloud is to be discovered in the sky.

Rogers, Brown & Co., iron merchants, will say in their weekly report:

The predicted advances in all the markets have been accomplished, and the large buying movement inaugurated two weeks ago continues. The feature of the situation is the withdrawal from the market of a number of furnaces in both

North and South. The tremendous buying of the last week has put them out of the market for this year, and they are refusing to offer what available tonnage remains for the first quarter of 1906.

A number of Southern furnaces are holding at $12.50 Birmingham; this figure having been pegged up last week. Prices for first quarter and first half of next year, when furnaces can be persuaded to make them, are generally ruling 50c per ton higher than for the last quarter of this year. It is becoming more and more difficult to get the furnaces to make figure for these deliveries.

Not for years past have sellers had to contend with the demands made on them by buyers during the past two weeks. This is not only true of sales, but shipments. All grades are in excellent demand. Material due is being hurried and in numerous cases there is request for anticipation.

The remarkable business in rails, which has been mentioned from time to time in these reports, has not yet reached an end. Additional contracts closed in the East and West and for foreign shipment during the week will run in the neighborhood of 300,000 tons. The question has been advanced as to whether the buying of the past few weeks was for legitimate needs or anticipating difficulty in getting metal later. Viewed from all points, the opinion of the majority of those interested seems to be that it is the direct result of expansion in trade conditions through which the country has gone during this year.

Coke is the strongest of all, due to curtailed product, great difficulty in car supply and presence of a number of furnace inquiries for early delivery and contracts for 1906.

The shortage of cars is going to be of tremendous import from now on. It has been stated that over 200,000 freight cars have been moved to the West, with the crop movement not yet in full swing, and on every hand there is heard nothing but reports of a dismal outlook for heavy freight.

An interesting feature of the present activity is the sympathetic advance in British iron, with further advance looked for.

SHEETS.

John McVoy & Co., Chicago, report as follows:

The market condition on sheets is decidedly better; there is a tendency to ask higher prices by all of the mills, and nearly all of the independent mills are now asking $2.00 a ton more than heretofore. The mills are fairly well filled up with business. There is a good fall demand and higher prices are looked for.

We quote prices as follows:

Black sheet steel No. 16 gauge, $2.45; No. 18-20 gauge, $2.50; No. 22-24 gauge, $2.55; No. 26 gauge, $2.60; No. 27 gauge, $2.65; No. 28 gauge, $2.75; No. 29 gauge, $2.95.

Wood's smooth, No. 20 gauge, $2.90; No. 22-24 gauge, $2.96; No. 26 gauge, $3.00; No. 27 gauge, $3.05; No. 28 gauge, $3.15.

Wellsville polished sheet steel, 24 gauge, $4.85; 26 gauge, $4.95; 27 gauge, $5.05; 28 gauge, $5.15.

Galvanized sheets, regular sizes, 14 and 15 gauge, $2.80; 18-20 gauge, $2.05; 22-24 gauge, $3.10; 26 gauge, $2.30; 27 gauge, $3.50; 28 gauge, $3.70; 29 gauge, $4.00; 30 gauge, $4.50. Thirty-six-inch wide on No. 20 and lighter, 20c per 100-lb advance. On 48-inch wide material, 16 gauge, $3.60 18 gauge, $3.90; No. 20 gauge, $4.55.

Corrugated, 2½-inch, painted, No. 28 gauge, $2.15 a square. Galvanized, $3.25 per square. Sheet copper, 21c base. Solder, warranted 50-50 at 20c lb.

CHICAGO HARDWARE MARKET.

The general sentiment of the country is that the hardware conditions now prevailing have never been excelled. Manufacturers as a whole have never been in a better position to express their actual sentiment toward jobbers. A slight feeling of independence is being manifested by some, especially by the manufacturers of builders' hardware. These last named concerns are finding it hard to keep pace with orders and are finding it necessary to refuse many which would ordinarily be booked with the greatest of avidity. Thousands of new buildings are being erected in almost every section of the country and the completion of these is delayed in many cases by lack of builders' hardware. Efforts are being made to increase the producing ability of the manufacturing plants but much cannot be expected in the immediate future.

A summary of the opinions of hardware merchants in New Orleans and the immediate vicinity show that the fever and the accompanying quarantine have held the volume of business to a point about ten per cent lower than the amount recorded for the preceding year. Nevertheless, in spite of these obstacles, country stocks are badly depleted. Well defined rumors of advanced prices to be published in the future have stimulated a strong demand and rural jobbers in Southern sections of the country are hastening to fill up stocks. Shipments of hardware from New Orleans to Central America and especially to Honduras have improved considerably since the disappearance of the fever infection. A number of orders held up pending the outcome of this fight between science and nature are now being filled. It is said the trade in Cuba has shown signs of progress likewise.

Dun's agents report most favorable conditions in all lines of the retail trade. Fall sales have begun most auspiciously, the demand being well distributed and of good volume. Bradstreet is likewise optimistic and reports the tenor of the jobbing and industrial trades as more unanimously favorable at present than at any previous period during 1905. Business failures in the United States for the week ending September 21st number 173, as against 188 during the preceding week and 203 during the corresponding week in 1904.

The government crop report for the week ending September 25th shows that the temperature was favorable throughout the whole country. Rains caused some damage in portions of Missouri and the upper Mississippi Valley, while the states in the extreme south-eastern sections of the country would be benefited by a more generous dose of the dew of the heavens. Reports of damaging frost were received from only one section of the country, the middle Rocky Mountain portion. Corn is in good shape and from seventy-five to ninety per cent is now safe from frost. The remainder will be safely harvested if the weather continues good for a few more days. Some sections of the Missouri Valley are the only districts from which unfavorable reports have been heard. The thrashing of spring wheat in the Dakotas and Minnesota was interrupted by rain. The Dakota crop is reported as disappointing. Cotton seems to be generally good; likewise tobacco, but an inferior crop of apples and potatoes is the general verdict.

No advances in the hardware market are to be recorded but advances in jobbers' prices will probably soon be made on some, if not all of the following lines: Sash weights, jack screws, wire rope, cut nails, bolts, copper and brass goods, cast iron goods and the different lines of builders' hardware. These markets are all exceptionally strong.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x14	$10 50
IC	14x20	7 15
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 85
IXXXX	14x20	13 10
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 75
Cokes, 216 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$16 50@$17 00
North'n Coke Fdy., No. 1	16 75@ 17 00
North'n Coke Fdy., No. 2	16 25@ 16 75
North'n Coke Fdy., No. 3	15 75@ 16 25
Northern Scotch, No. 1	17 25@ 17 50
Ohio Strong Softeners, No. 1	17 05@ 17 30
Ohio Strong Softeners, No. 2	16 55@ 16 80
Southern Silvery, 4 to 6 per cent Silicon	16 65@ 17 65
Southern Coke, No. 1	15 90@ 16 15
Southern Coke, No. 2	15 40@ 15 65
Southern Coke, No. 3	14 65@ 15 15
Southern Coke, No. 4	14 40@ 14 90
Southern Coke, No. 1, Soft	15 90@ 16 15
Southern Coke, No. 2, Soft	15 40@ 15 65
Southern Gray Forge	14 15@ 14 65
Southern Mottled and White	13 90@ 14 40
Malleable Bessemer	16 50@ 16 75
Jackson Co. & Ky. Silvery 8% Silicon	19 30
Jackson Co. & Ky. Silvery 10% Silicon	20 30
Alabama Basic	13 65

BLACK SHEET STEEL.

No. 16	per 100 lbs. $2 55
No. 18-20	per 100 lbs. 2 60
No. 22-24	per 100 lbs. 2 65
No. 25-26	per 100 lbs. 2 70
No. 27	per 100 lbs. 2 75
No. 28	per 100 lbs. 2 85
No. 29	per 100 lbs. 3 05

POLISHED SHEET STEEL.

No. 24	per 100 lbs. $4 60
No. 26	per 100 lbs. 4 70
No. 27	per 100 lbs. 4 80
No. 28	per 100 lbs. 4 90

SMOOTH STEEL.

Wood's Smooth, No. 20	$2 90
" " No. 22-24	2 95
" " No. 25-26	3 00
" " No. 27	3 05
" " No. 28	3 15

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel.	
.....	....."A" $10 20, "B" $9 20
Dickey Planished Sheet Steel	8¼c

GALVANIZED IRON.

Regular Sizes.

No. 16, per 100 lbs	$3 20
Nos. 18 & 20, per 100 lbs	3 35
Nos. 22 & 24, per 100 lbs	3 50
No. 26, per 100 lbs	3 70
No. 27, per 100 lbs	3 90
No. 28, per 100 lbs	4 10
No. 29, per 100 lbs	5 00
Nos. 22 & 24 x 96 in., per 100 lbs	3 70
No. 26 x 96 in., per 100 lbs	3 90
No. 27 x 96 in., per 100 lbs	4 10
No. 28 x 96 in., per 100 lbs	4 30

SOLDER.

XXX Guaranteed ½ & ½	per lb. 20½c
Commercial ½ & ½	per lb. 19c
No. 1 Plumbers	17½c

SHEET ZINC.

600 lb. Casks	....cask, per cwt. $7 90
300 lb. Casks	per cwt. 7 95
Sheets	per cwt. 7 70

COPPER.

Copper	base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits, pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb	7½c
Sheet.	
Full coils	per 100 lbs. $7 00
Cut coils	per 100 lbs. 7 25

HARDWARE.

ADZES.

Carpenters'.	
Ajax	35&15%
Blood's	40&2½%
Coopers'.	
Barton's	20%
White's	15%
Ship.	
Ajax	33⅓%
Blood's	37½%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.	
F. L. Waterproof, 1-10s	40c
G. D.	35c
Eley's	53c
Cartridges.	
Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol and Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&8%
Peters Blank Ctgs. 22 cal	$1 24
Peters Blank Ctgs. 32 cal. C. F.	4 60
Peters BB Caps, Round ball	1 50
Peters BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
Primers.	
Berdan Primers	$1 00
Peters Primers	20%
Winchester Primers	20%
Shells.	
Peters Empty Paper Shells, 10 and 12 gauge. League	25&2%
Peters Empty Paper Shells, 16 gauge. League	20&2%
Ideal Empty	25&7%
Peters Target and High Gun Smokeless	40&8%
Peters Premier and Ideal Smokeless	40, 10, & 10%
Peters Loaded Shells, League	40%
Peters Referee Semi-Smokeless	40&2½%
Winchester Blue Rivals; Winchester Yellow Rivals	33⅓ & 11%
Winchester Repeater	40&5%
Winchester Leader	40-10&10%
Winchester Loaded Shells, Black Powder	33⅓ & 11%
Gun Wads—per 1,000.	
Peters Gun Wads	18%

Powder.		Each
King's Smokeless, kegs		$11 30
" "	½ kegs	5 80
" "	¼ kegs	2 97
" "	1-lb. cans	51
" "	1-lb. " rifle	70
Dupont's "	50-lb. drum	22 45
" "	25-lb. kegs	11 35
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
" "	1-lb. cans	51

Shot.	
Drop shot, sizes smaller than B, 25-lb. bags, per bag	$1 65
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 90
Buck Shot, 25-lb. bags, per bag	1 95
Chilled Shot, 25-lb. bags, "	1 90

ANCHORS.

Expansion Screw Anchors	10%

ANVILS.

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper	33⅓%

AUGERS.

Boring Machine	60&10&5%
Irwin's	40&10%
Carpenters' Nut	60&10&5%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3 "	33 50
Post Hole.	
Digwell, 8-inch ..... per doz.	12 50
Iwan's Post Hole and Well	40&5%
Iwan's Vaughan pattern, 4 to 9-in., per doz	6 00
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw	40-5%
Snell's, " " "	40-5%

AWLS.

Brad.	
Handled ..... per doz.	$0 28
Shouldered, assorted, 1 to 4, ... per gro.	95
Patent asst'd, 1 to 4 .. "	90
Harness.	
Common ..... "	1 10
Patent ..... "	90
Peg.	
Shouldered ..... "	95
Patent ..... "	40
Scratch.	
No. 2, handled ..... "	4 80
No. 1, socket handled .. per doz.	1 15
No. 20 Hurwood ..... "	2 00
Sewing.	
Common ..... per gro.	90
Patent ..... "	90

AXES.

Boy's Handled.	
Camp Fire, 3 lb ..... per doz.	$6 25
" " 4 lb., freighters', ... per doz.	7 85
Cast Steel, good grade, "	6 25
Pioneer ..... "	6 75
Broad.	
Peerless	40-10&5%
Red Warrior ..... per doz.	$22 50
Firemen's (handled) ... "	13 00
Single Bitted (handled).	
Gladstone, 3 to 4 lbs., per doz.	$10 75
Hunt's " " "	9 00
Lippincott's " " "	9 00
Mann's " " "	9 00
Pioneer " " "	9 75
Valley Forge " " "	9 00
Maricopa " " "	7 50
Single Bitted (without handles).	
Gladstone, per doz. 3 to 4 lbs.	$8 50
Hunt's " "	7 00
Lippincott's " "	6 75
Mann's " "	9 50
Pioneer " "	9 50
Valley Forge " "	6 75
Maricopa " "	6 00
Double Bitted (without handles).	
Lippincott's, 3 to 4 lbs. per doz.	$9 25
Mann's " "	9 50
Pioneer " "	9 25
Valley Forge " "	9 25

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$3.00	4.50	5.50	6.00

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point ..... cwt.	$2 95

BASKETS.

Clothes.		
Small Willow ..... per doz.	$5 75	
Medium " ..... "	6 50	
Large " ..... "	7 25	
Galvanized Iron.	½ bu.	1 bu. 1½ bu.
Per doz.	$4 00	5 50 7 00

BEATERS.

Carpet.	
Rattan ..... per doz.	$2 40
Raymond's Steel Wire "	80
Woven Wire, No. 4 ..... "	1 10
Egg.	Per doz.
o. 60 Imp. Dover	$0 60
No. 75 " "	65
No. 100 " "	75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 152 " " hotel tin'd.	1 75
No. 200 " "	80
No. 202 " " tinned	90
	Each
No. 300 " " mammoth.	2 50

BELLOWS.

Blacksmiths'	70%
Hand.	
8 inch ..... per doz.	$6 85
10 inch ..... "	8 40
Molders'.	
12 inch ..... "	13 00

BELLS.

Call.	
2½ in. nickeled bell ... per doz.	$1 85
2½ in. " brass bell "	3 60
3 in. " " " "	7 50
3 in. " silver alloy bell ..... per doz.	17 00
4½ in. nickeled brass bell and base ..... per doz.	14 50
Cow.	
Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%
Door.	
Bigelow Automatic .. per doz.	$9 50
Rotary.	
3 in. bronzed iron bell "	5 25
3 in. nickeled " " "	7 50
3½ in. " " " "	9 00
Hand.	
Hand Bells, polished	60@60&10%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	70, 10&5%
Farm, lbs 40 50 75	100
Each $1.10 1.30 1.85	2.65

BEVELS, TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley's iron handle	40&5%

BINDING, OILCLOTH.

Zinc	75&10%
Brass	72½%
Brass Plated	75&10%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Ford's	40&5%
Ford's Ship	40&5%
Irwin	50&5%
New Jenning's	50, 10&10%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	30%
" Large " $26.00	30%
Irwin Car	45%
Snell's Car	60&5%
" Ship	40&5%
Ford's " Auger pattern Car	40&5%
Center	40&10%
Countersink.	
Wheeler's ..... per doz.	$1 30
American Snail head. "	70
" Rose " "	80
" Flat ..... "	70
Buck Bros.' Flat ..... "	2 65
German ..... "	70
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	50&5@50&10%
German Pattern ..... per doz.	$0 48
Gouge ..... "	80
Spoon ..... "	80
Countersink ..... "	1 30
Reamer.	
Buck Bros.' ½ Round .. "	2 75
" " Square . "	2 50
Standard ½ Round .... "	75
" Square ..... "	75
German Octagon ..... "	75
Screw Driver.	
Round Shank ..... "	36

Round Shank, extra..
quality ..... " 1 40
Square Shank ..... " 1 10

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ⅞ & 1⅛ in.....60&5%
Clock Spring.....60&5%
Star 15%

Hack.
Disston's .....25&5%
Griffin's.....25&5%
Star 15%

Wood.
Jackson's .....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
No. 11 ..... 6 40
W. M. & Co.'s No. 20..per doz. 5 50

BLOCKS.

Snatch.
Wooden .....55&10%
Steel .....40&10%

Tackle.
Wooden .....70&5%
Steel .....50, 10&5%

BOARDS.

Stove.....40%

Wash.
Globe .....per doz. $2 55
Banner..... " 2 90
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate ..... " 3 40
Enamel King..... " 2 40

BOBS, PLUMB.

Carpenters'.
8½ oz. iron.....per doz. $0 65
1½ lb. " ..... " 1 60
2½ lb. " ..... " 1 80
13 oz. lead ..... " 3 00
6½ oz. brass..... " 3 30

BOLTS.

Carriage, Machine, Etc.
Carriage ⅝x6 and sizes smaller and shorter.....75&5%
Carriage, sizes larger and longer than ⅝x6 .....70&5%
Machine, ⅝x4 and sizes smaller and shorter.....75&5%
Machine, sizes larger and longer than ⅝x12.....70&5%
Machine, longer and larger than ⅝x12.....70%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire .....75&10%
Wagon Box Strap .....70&10%

Mortise Door.
Gem.....50&10%
Ives'.....50&10%

Barrel.
Cast 50%
Wrought .....50&5%
" Bronzed.....75&5%

Flush.
Wrought, B K .....40&5%

Spring.
Wrought .....75&10%
" Brass .....75&10%

Square.
Cast.....40%
Wrought .....60-10&10%

Tire.....72&1½%

BORERS.

Angular.
Miller's Falls.. .... per doz. $13 75

Bung.
Common ring with handle.
Inches..... 1½ 1¾ 2
Per doz.....$6.25 7.25 8.50

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2 00 each..25, 10 & 2½%

BOXES.

Mail, No.... ..... 5 10 20
Per doz..... $3.50 10.50 13.00

Miter.
New Langdon.....15&5%
Olmsted's 10%
Stanley's.....30%
Seavey's .....each $1 30

BRACES.

Barber's .....50&10&10@60&10%
Fray's Genuine Spofford's.....60%
..Fray's No. 70 to 120, 81 to 123, 207 to 414.....60%
C. E. Jennings & Co.....50&5%
Mayhew's Ratchet 60%
Mayhew's Quick Action Hay Pat. 50%
Miller's Falls Drill Braces.....25%

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 75
" No. 2 " 10 50

Shelf.
Cast Iron, Japanned.....50, 10, 5%
Stanley's Wrought Steel 70-10&2½%
Wire .....80, 10&5%

BROILERS.

Wire.....70&10%
Crown, Self-Basting, No. 80. doz. $2 16

BUCKETS.

Pump Rubber.
Wychoff.....per gr. $4 75
Cooper..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz..... $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 3 75
" " swivel " 4 85
" side-strap, plain " 3 85
" " swivel " 4 95

BUCKS, SAW.

Folding .....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....35-10&5%
Tinners' Iron Burrs only.....70%

BUTTS.

Cast Iron.....65-10&5%
Wrought Brass.....15%
Wrought Steel Bright—Nos. 800, 804, 808, 810, 814 and 834..75-10&10%
Nos. 838, 840 and 842....75-10-10&10%
Nos. 822 and 823.....85-10&7½%
Wrought Steel, Japanned.
Nos. 731 and 727.....70-10-10&10%

CALIPERS.

Double .....60&12½%
Inside and Outside.....60&5%
Wing..... .....60-10&10%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75

Toe.
Shoenberger.....per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock.
Gallons.... 15 20 30 40
Per set.... $2.85 $3.05 $3.25 $4.40

Milk.
Elgin Pattern.
Nos..... 808 810
Gals..... 8 10
Per doz..... $18.00 $23.80

New Elgin Pattern.
Eureka Pump, 5 gal.....$7 85
Wood Jacket.....70, 10&10%
Nos..... 105 108 110
Gal. each .. 5 8 10
Per doz.... $13.75 $15.00 $14.75

Iowa Pattern.
Nos..... 608 610
Gal 8 10
Per doz..... $18.00 $19.20

New York Pattern.
Nos..... 908 910
Gal. each..... 8 10
Per doz..... $22.15 $23.00

Oil and Gasoline.
1 Gal. glass, Daisy....per doz. $1 80
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1.45 $2.40 $3.35

Per doz.
Sterling Tilting, 5 gallon.....$ 8 00
"High C" Pump, " 12 00
Eureka Pump " 9 25
Wooden Jacket.....60&10%

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....33⅓%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list. .....60&5%
Philadelphia Plate, new list..65&10%
Martin's.....50-10&5%
Payson's.....70&10%
Tucker's, Wood & Iron Wheel.25&5%
" Rubber Weeel.....15%

CATCHERS, GRASS.

Bieder's No. 1.. .....per doz. $5 75
Eureka ..... " 4 25
Ideal No. 4..... " 10 50

CHAIN AND CHAINS.

Breast Chains.
Doubleslack .....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85

Bright Ox Chains.
⅜ in. $7.25; ½ in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ⅜ 7/16 ½
Per 100 lbs.. $9.30 $6.50 $5.40 $4.60
Inch..... 9/16 ⅝ ¾ ⅞
Per 100 lbs.. $4.40 $4.30 $4.15 $4.05
Inch..... ⅞ 1 1⅛
Per 100 lbs.. $4.00 $4.00 $4.10

Cable Log Chain.
Advance 35c per 100 lb. on Cable Coil

Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%

Halter Chains.
American, new list.....33⅓%
German.....60-10&5%

Niagara, new list.....40&5
Triumph, " 30%

Picture Chains.
Light Brass, 3 ft.....per doz. 63c
Heavy Brass, 3 ft..... " 75c

Pump Chain.
Galvanized, per 100 lbs.....$5 25

Safety Chain.
Brass.....60&10%

Special Steel Loading Chain.
Inch ..... ⅜ 7/16 ½
Per 100 lbs... $16.00 $13.50 $12.50

Stretcher Chains.
5/16 in. $6.50; ⅜ in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's .....70&10%

Trace Chains.
Western Standard.
6½—6-2..... ...per pair 30c
6½—8-2..... " 34c
6½—8-3..... " 33c
6½—10-2..... " 38c
7 —8-2..... " 38c
7 —10-2..... " 42c
7 —10-1 ..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ⅜ 7/16 ½
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL.

In barrels.....per bu. 22c

CHECKS, DOOR.

Blunt 30%
Blum-Jap'd, $6.25; Brzd., doz....$7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20

Cold.
Good quality.....per lb 10@19c

Socket, Framing and Firmer.
Barton's.....20%
For beveled back, add per doz..60c

Tanged, Firmer.
With handles, add per doz.....60c

Choppers, Enterprise Meat.
No. 12..... $2 10
No. 22..... 3 40

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.15 $4.40
Belle, Barrel. 70%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Hero.....70%
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'
Steel Bar.....25%

Hose.
Sherman's, brass, ¾ in., per doz..33c
Double, brass, ¾ in., " 65c

Saw Filers.
Disston's list, $30.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.50 doz.
Wentworth's.....40%

CLAWS, TACK.

Cast, wood hdle.....per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.60
Giant..... " .60

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire..... per doz. $0.55

Side-walk.
Steel..... per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.
Ajax, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25

CLEVISES.

Malleable ....per lb 3½c

CLIPPERS.

Bolt.....$1.90@$4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 20c

CLOTH.

Emery.
Ajax..... 50&10%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 85
9 to 12 " " " " 2 15
2 to 8 " galv. " " 2 70
7 and 8 " " " " 4 25

Screen Wire.
12 mesh, painted, per 100 sq. ft..$1 25
14 " " " " 1 85

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks.....70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....70-5%
Compression Lock C'ks(n'w list)..70%
No. 65 Brass Liquor Cocks, doz.. $9.15
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz....$0.85
Milk Can Faucets, per doz...$2.60-4.20
Petroleum Faucets (new list)....70%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin....per gro. $2.00 $2.35 $3.40
Japanned Tin " 3.20 3.45 4.50
Lacquered Brass " 2.55 2.90 4.00

COMBS, CURRY.

Nos . 000 20 321 330 417 416
Per doz. $0.32 .80 .90 .95 .80 1.00
Nos 531 533 530 535 545 390
Per doz. $0.96 1.20 1.10 1.85 1.40 1.30

COMPASSES.

Carpen'ers'.....70%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb .....per lb 31c
1½ lb.....28c 2 lb.... " 27c
3 lb and larger..... " 25c

CORD.

Picture.
White Wire .....80-10&5%

Sash.
Baltic Braided Flax.....per lb 20c
Silver Lake, white 7-32 in. " 29c
" " 8-32 in. " 22c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular..... 50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&10%

COUNTERSINK.

Buck Bros. Flat.....per doz. $3 65

COUPLINGS, HOSE.

Brass.....per doz. $1.00
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz. $22.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.00

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co. 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 100, list, $18.00 ..... 40&10%
Nos. 2 and 4 ..... 25%
Universal... Nos. 1 2 3
Per doz $10.50 $12.50 $17.00
Smith & Hemenway Co 25%
Pipe.
Stanwoods... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 65
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES, STOCKS AND

Discount ..... 40&5%

DIGGERS.

Post Hole.
Acme ..... per doz. $8 75
Atlas ..... " 8 25
Eagle ..... " 5 75
Eureka ..... " 6 25
Hercules ..... " 9 75
Iwan's Split Handle.. " 7 00
Iwan's Perfection ..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's ..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $6 85
1⅛ in. " " " 7 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 11 50

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60% & 65&5%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 02 3 20
Per doz.. $7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List... 60&5%@60%@10%

DRIVERS, SCREW.

Hurwood ..... 40-10&10%
Standard ..... 65&10%
Ajax ..... 70&5%
Champion 45%
" Pattern ..... 60, 10&5%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co ..... 40&5%

EAVE TROUGH. GALVANIZED.

Territory.	L. C. L.
Eastern	80&5%
Central	75&10&10%
Southern	75&12½%
S. Western	75&5%

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.30
Plan'd " 2.00 2.25 2.85
Corrugated Conductor.
5-inch ..... each 60c; per doz, $7.20
6 " ..... " 70c; " 8.40
75% discount to dealers on 2-inch' 3-inch and 4-inch plain, round and round corrugated elbows.
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.50
Pol'd " 1.50 1.75 2.50
Plan'd " 2.20 2.60 3.20
Four-Piece Stove.
Inches 5 6 7
Smooth. per doz. $0.50 $0.52 $0.90
Pol'd " .95 1.05 1.40
Plan'd " 1.45 1.60 2.60

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ½ kegs. kegs
No. 60 to 150, per lb. 6½c 4½c 4½c
Flour ..... " 5½c 3½c 3½c

ENAMEL, IRON.

English, ½-pt. cans ..... per doz. $1 50
Nubian " " ..... " 1 80
Peerless 1 50

EXTRACTORS, PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass 55%
Iron ..... 65&5%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 1 40
Sensible ..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Black Diamond ..... 70&10%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel ..... 90&2½%
Wood, 4 tines, per doz $3.25
Coal, Coke, Cottonseed 60%
Hay,
Diamond, 2 tine ..... 60&10%
" 3 " 70%
" 4 " 50%
Golden Eagle, 3 tine 75%
" " 4 " 80%
Digging ..... 70&10%
Scoop 50%
Header.
Diamond, 3 tine ..... 66⅔&5%
" 4 " ..... 65&10%
Manure.
Diamond, 4 tine ..... 70&10%
Golden Eagle 90%
Ore 40%
Spading.
Diamond ..... 80&10%
Golden Eagle ..... 80, 10&5%

FRAMES.

Hack Saw.
Crown ..... per doz. $6 25
Miller's Falls ..... " 10 20
Star ..... " 2 85

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power. " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s... 20&10&2½%
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc. .....
..... 50&10%@50&10&5%
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First two brackets ..... 98&15%
Above " " 90%

GLASSES, LEVEL.

Stanley R. & L. Co. ..... 50&5%

GLUE.

Bulk.
B Amber ..... per lb. 11 c
A White ..... " 13½c
H. S. Amber ..... " 15½c
Liquid.
Eagle 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 95&20%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. $5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone ..... 40&10%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz $8.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing.. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 10
Peg.
Common ..... " 22
Patent, plain top .... " 47
" leather top... " 52
Sewing.
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 6 50
" leather tie.... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Maydole's ..... 40&10%
Engineers'.
Maydole's ..... 40&10%
Farriers'.
Maydole's ..... 35&5%
Machinists'.
Maydole's ..... 40&10%
Nail.
Ajax ..... per doz. $4 00
Calumet ..... " 3 15
Cast ..... per doz. $1 10@ $4 10
Maydole's ..... 40&5%
Vulcan ..... 45&5%
Riveting.
Maydole's ..... 35&5%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 53
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs ..... 80&10%
5 lbs. and over ..... 85&5%
Masons'.
Single & Double Face ..... 70&10%

HANDLES.

Auger.
Common Assorted ... per doz. $0 38
Peck's Adjustable ... " 2 10
Roger's " ... " 4 25
Ives' " .... per set 1 35
Axe 60%
Chisel.
Hickory, Tanged Firmer, Assorted, 25c; Large, 27c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 22c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye ..... per doz. 48c
Blacksmiths' ..... per doz. 55c@80c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 45c
Hay and Manure Fork ..... 40&5%
Hoe and Rake ..... 40&5%
Saw.
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 40%

HANGERS.

Barn Door.
Monarch ..... 60&10%
"Never Jump" Hinge ..... 50&10%
Peerless, Loose Axle ..... 60&10%
Perfection, Roller Bearing .. 70&5%
Phoenix, Roller Bearing ..... 70&5%
Prouty, No. 315.. per doz. prs. $6 35
Rival ..... " " 3 65
Superb ..... " " 5 50
Safety Flexible . " " 6 35
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Conductor Pipe.
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $2 35
Imperial 20%
Wire 35%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought ..... 50&5%
With Staples—See Staples.

HATCHETS.

Ajax 45%
Blood's 50%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling.... " $0 95@1 20
Duffy's Barrel ..... per doz. $15 00
Germantown 60%
Hammond's 40%
Roger's Ideal ..... per doz. $5 25
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1.... per doz. $ 9 75
" No. 2.... " 10 50

HINGES.

Blind.
Clark's Gravity ... per doz. sets 80c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 05
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.35 2.60 3.65
Hinges only .... " 1.70 1.90
Latches only... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 20%
Bommer Bros. Ball B'g Floor .. 35%
Bommer Bros. Spring Hinges .. 40%
Chicago ..... 25&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 25%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $8.40
Oxford 20%
Wrought Iron.
New Lists .....
Light Strap Hinges ..... 70&5%
Heavy Strap Hinges ..... 75&10%
Light T Hinges ..... 65&5%
Heavy T Hinges ..... 70-10&5%
Extra Heavy T Hinges .... 70-10&5%
Cor. Heavy Strap 80-20-10-10-10-10&5%
Cor. Ex. Heavy T 80-20-10-10-10&5%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 65
14 to 20 in ..... " " 3 40
22 to 36 in ..... " " 3 15
Screw Hook and Eye.
⅝ in ..... per 100 lbs. $6 55
⅞ in ..... " " 7 60
⅞ in ..... " " 9 45

HOES.

Garden ..... 70&15%
Grub.
Ajax ..... 60 & 10%
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' ..... 70&15%
Mortar ..... 75&10%
Planter's Eye 62½%
Weed ..... 75&5%

HOOKS.

And Eyes.
Brass ..... 50&10&5%
Iron ..... 65&10%
Awning ..... per gro. $1 80
Belt.
Brown's ..... 70&5%
Jones' ..... 65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle
..... per doz. $7 00@8 65
Hamilton Pattern.....per doz. 7 35
Chain.
Inch... 1/4 & 5/16 3/8 7/16 1/2
Per 100 $7.60-8.10 9.75 11.50 12 60
Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....75&10%
Conductor.
Malleable.....50&10%@50&10&5%
Wrought .....40&10%@50%
Corn.
Common, unpolished, per doz. $1 40
" polished.... " 1 80
"Cut Easy"..... " 3 75
Clyde's..... " 2 20
Gale.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.75 1.80 1.90
German.....per doz. 1 90
Little Giant..... " 2 90
Wood's..... " 1 20
Hammock.
With Plate.....per doz. 33c
With Screw..... " 33c
Lambreguin, or Drapery, per gro. 21c
Picture .....50%@50&10%
Potato and Manure.....65&15%
Screw.
Brass.....80&20%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.

Ever Ready .....per case $1 70

HOSE, GARDEN.

3 ply ¾ in. 35 lb. pressure per ft....5½c
3 " ¾ " 50 " " " 7½c
3 " ⅞ " 70 " " " 7½c
3 " ⅞ " 70 " " " 9c
4 " ⅞ " 80 " " " 9c
4 " ⅞ " 80 " " " ...10½c
6 " ⅞ " 125 " " " ...11½c
8 " ⅞ " 150 " " " 13c
Cotton ¾ in. 75 lb. pressure per ft. 7c
" ¾ " 150 " " " 9c

HUSKER.

Boss.
Nos..... E A B
Per doz.....$1.85 2.05 2.05
Nos..... P PX
Per gro $5.40 4.50
Nos.....2000 3000
Per gro.....$3.00 6.75
Nos..... 4000 O OX
Per doz.....$1.15 1.85 1.35
Brinkerhoff's.
Per gro.....$14 50
Ideal.
Nos..... 102 101 100
Per doz.....$1.35 2.50 2.75
Johnson's.
Per gro.....$7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz. 33c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90
Pinking ..... " 70
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list) 25&5%
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 lb. 3 10
" Nickel plated, " 4 20
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells..... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per lb. 4½c
" Geese..... " 4½c
Tuyere.
Single Duck Nest....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive.....75&5%
Wagon.
Meekers'.....per doz. $11 00
Miller's No. 2..... " 7 75
Winner ..... " 7 75
Smith & Hemenway Co 25%

KETTLES.

Brass.....15%
Caldorn 45%
Copper.....per lb. 27c
Maslin 66⅔%
Sugar .....50&5%

KNIVES.

Best Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15%
Corn.
Ajax.....per doz. $2 10
Drawing.
Standard 70%
Adjustable.....15%
Barton's Carpenters'.....10%
" Folding Handle....25&5%
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 7 75
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75
Hedge.
Ajax, Heavy.....per doz. $6 25
" Extra Heavy.... " 8 40
Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... " 2 0
Putty.
Common..... " 84
Goodell's.....per doz. $1 30@1 80
Russell's..... " 1 75@2 25

KNOBS.

Door.
Mineral .....per doz. $0 72
Porcelain ..... " 82
Jet..... " 83

LADDERS.

Common Long.
Per ft .....9c@14c
Extension.
Per ft 12c
Step.
Common, per ft.....6½c
" with Shelf, add 10c.
I X L, per ft 19c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
2¾-in. Regular..... " 4 00
3-in. Regular..... " 5 00
Tubular.
Berger.....40&10&5%

LEADERS, CATTLE.

Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Cut.....50&5%
Slaes.
Ex. Quality.....per sq. ft. 20c

LEATHERS, PUMP.

Valve and Plunger 50%

LIFTERS.

Stove Cover.
Japanned .....per gro. $2 65
Coppered..... " 3 65
Devore's..... " 5 50
Zero..... " 4 00
Transom.
Payson's.....70&10%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 15 14 13 12 11
Per doz.....10c 13c 17c 22c 29c
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....26c 31c 36c 42c
Braided in 20-ft. hanks.
Nos..... 0 1 2
Per doz 23c 26c 32c
Masons', in 100-ft. hanks..doz. $1 00
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 10
60-ft. Sisal ..... " 1 50
72-ft. " ..... " 2 10
50-ft. Cotton ..... " 85
50 ft. Braided Cotton. " 95

LINING, STOVE.

Fan Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Ajax.....per doz.	$5 25	$6 75
Angular.... "	3 25	4 65
Boss ..... "	4 25	5 75
Upright.... "	2 90	4 35

Leather Riveting.
Chicago, Pomeroy....per doz. $0 75
Excelsior ..... " 2 50
Handy ..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss 1 2 5
Per doz.....$56.20 62.20 68.20
Globe, No. 1 .....per doz. 53 00
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 6 75
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40
Tinners'.
Applewood ..... " 1 70
Hickory..... " 80
Hickory Sheet Iron.. " 1 30

MATS.

Door.
National Rigid.....50, 10&5%
Queen Flexible.....50%
Stove.
Standard Quality...per gross $2 90
Best " (Pure) " 4 00
Wire Covered Asbestos, Ex.
Heavy .....per doz. 1 00

MATTOCKS.

Ajax.....60&10%
Extra 70%

MAULS.

Iron. lbs. 10 13 16 18 21
Per doz. $2.95 3.65 4.20 4.60 5.05
Wood face, lbs. 10 11 12
Per doz $4.55 4.90 5.15
Wood Choppers'.
Lake Super'r & Oregon Pat. 70&10%

MEASURES.

	½ pk.	1 pk.	½ bu.
Galvanized, per dz.			$4 25
Japanned... "	$1.40	2.10	2.60

METAL.

Babbitt.
Alm .....per lb. 7½c
Best..... " 13 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.

First Quality.....25%
Second Quality.....35%

MILLS, COFFEE.

Enterprise 25%
Parker.....50%
Arcade 50%

MITRE BOXES.

See boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... 1 1 1½ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Ball-Bearing.
Inches..... 15 17 19 21
Each $7.50 8.50 9.50 10.50
Cheap Grades.
Inches..... 12 14 16 18
Each $2.30 2.35 2.35 2.50
Clipper .....50, 10&10%
Girard.
Inches..... 14 16
Each.....$3.25 3.50
Philadelphia.
All Styles Except A & E 60, 10&10%
Style A.....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price

NAILS.

Cut Steel.....rates, $2 00
Horse Shoe.
Ausable .....45&5%
Capewell 5%
Perfect .....40&5%
Putnam 10-5%
Star 35%
Picture.
Brass Heads .....60&10%
Judd's.....60&10%
Brads.....80, 10&10%
Furniture .....65&10%
Wire.
Small Lots.....$2 00
Carload " 1 95
Cement Coated..... 1 75

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized Before Weaving..80&15%
" After Weaving...80&15%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern.....60&10%
End and Diagonal Cutting.
Swedish Side.....55%
Utica Drop Forge & Tool Co...40%
Hoof.
Heller's .....40&5%
V. & B.....40-5%

NOZZLES.

Hose.
Gennine Boston.....per doz. $3 05
Genuine Gem..... " 3 15
Magic..... " 3 15

NUTS, HOT PRESSED.

Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
lb. 9c 6c 4c 3½c 3½c 3½c 3c
Square Tapped.
In. ½ ⅝ ¾ ⅞ 1
lb. 12c 7½c 5c 4½c 4c
For 5 lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern
Brass and Copper.....35%
Zinc 60%
Engineers'
Cannon.....50%
Tin.....per doz. $2.00@$3.00
Machine.
Ajax.....per doz. $0 80
Copper Plated Steel.. " 1 50
Malleable Iron.....40, 10&5%
Tin.....per doz. 55c@65c

OPENERS.

Box.
Inches..... 10 12 14
Flat .per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75
Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination .....per doz. $11 50
Economical..... " 4 90
Family..... " 10 50

PADLOCKS.

Standard Wrought .....70, 10&5%
Champion 50%
Eureka.....40, 10&5%
Yale .....60&5%

PAILS.

Cream.
14-qt., without Ga....per doz. $2 65
20-qt., " " .... " 3 25
20-qt., with Gauge.... " 4 00
Sap.
10-qt., Galvanized.....per doz. 1 60
12-qt., " ..... " 1 85
Stock
Galvd. qts. 14 16 18 20
Per doz.....$3.50 3.75 4.50 5.00
Water.
Galvanized, qts 10 12 14
Per doz $1.75 1.95 2.25
Wood.
Cable, 2-Hoop.....per doz. $1 90
" 3-Hoop..... " 2 10
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 50
" 3-Hoop..... " 1 70

PANS.

Dripping.....60&10&5%
Fry.
Common.....60&10&5%
Acme.....66⅔&5%
Roasting.
Brownie.....each 22c@30c
L. & H..... " 45c@63c

PAPER.

Building.
Plain .....per 100 lbs. $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 45
Diamond A, Red Rosin, pr roll 60
Leader, Red Rosin..... " 45
Sand and Emery.
Ajax.....50&10%
B. & A.....50&5%
Wrapping.
Grecian Express.....per lb. 3½c
Rag..... " 2½c

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 5 70
White Mountain .... " 4 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&5%
Drifting and Poll Picks.....70%
Ajax Railroad.....60&10%
Extra Railroad .....70&5%
Surface.....65&5%

PINCHERS.

Carpenters', wrought iron, pol. steel jaws 30%
Blacksmith's 45%

PINS.

Clothes.
Common.....per gro. $0 14
Hoyt's..... " 31
U. S..... " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... " 1 90

PIPE.

Conductor.

Territory.	Nested.	Not Nested
Eastern.....	70&15%	70&10%
Central.....	70&7½%	70&2½%
Southern.....	70&2½%	60&20%
Southwestern..	60&20%	60&10%

Lead.
Full coils.....per lb. 6½c
Cut " ..... " 6½c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	43c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18c
Plan'hed	28 c	31 c	35½c
Made-up—In.	5	6	7
Smooth	7½c	8c	9½c

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Wrought Iron Gas Pipe
⅛@¼-in., black.....discount, 60%
⅜@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
⅛@⅜ " galvanized " 42%
½@½ " " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Siegley Iron Bench.....50&10%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In.	4½	6	8	10
Per doz.....	$2.60	$3.10	$3.90	$5.20

Button's Pattern.

In.	4½	6	8	10
Per doz.....	$2.35	$2.50	$3.45	$4.40

Cutting.
Bernard's.....30%
Lodi.....40&10&5%
4 Tube, revolving..... " 5.25

End and Diagonal Cutting.
Swedish Side 50%
Utica Drop Forge & Tool Co....40%

Fencing.
Farmers' Choice....per doz ..$8 80
Russell's..... " .. 8 80

Flat and Round Nose.
Bernard's.....30%
German 50%
Lodi.....40%
Paragon.....40&10%

Gas—In.	8	10	12
Per doz.....	$3.15	$4.10	$5.00

Tinner's.
Hollow.... .....
Solid..... each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

Stanley's.

Nos.	00S	0S	2S	3S
Per doz..	$4.65	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13.25	$17.75	$17.75	$12.35

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'ls " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Brown's, wr't steel, per doz.$5.00@6.00

POLES—FISHING.

Bamboo.

Ft.	12	18
Per. 100	$2.65	$6.25

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-6	¼	½
Per doz.....	$0.80	$1.10	$1.65

Pts.	1	2	4	8
Per doz	$3 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 lb cans. pr gr..$15.00
Black Silk—
5 lb. pail..... 80c
Paste, 5 oz. cans....per doz. $0 80
Paste, ½ lb. cans..... " 1 00
Black and Japanned—
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.. " 1 75
Blackene, 1 lb cans....pr gro. 13 00
Black Jack, ½ lb cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, 85@95c
Square, 1½ qt..... " $1 00
Square, 2 qt..... " 1 25
2 qt. Reversible..... " 1 50

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem..... " 6 75

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Henis .....per doz. $2 10

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $7 50
Henry's Improved..... " 65&10%
Water's Improved..... " 70,10&5%

PULLERS.

Cork.
Daisy.....each $3 40
Phoenix..... " 1 60
Quick and Easy..... " 2 90

Nail.
Giant.....33⅓%
Giant Pattern per doz.....$6 00

Tack—Giant..... " 45

Staple.....50%

PULLEYS.

Awning—Jap'd.....40&5% to 35&5%
Clothes Line.....20&10%

Hay Fork.
Iron Wheel, 5 in.....per doz. $1 85
Wood Wheel, 6 in.... " 1 80
Wood Wheel, 6 in., pass knot..... " 2 25

Hot House—Jap'd .....30&5%
Screw..... " .....30&5%
Side ..... " .....30&5%

Sash.
Clark's..... " 42
Common Sense, 2 in ..per doz $0 26
" Pattern, 2 in.. " 22
Empire..... " 24
Ideal..... " 22

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$.90	1.00	1.10	1.40

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 40
Machine.....per lb. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35
Commercial..... "

RAIL.

Barn Door.
Light Wrought.....per ft. 2½c
Safety..... " 4½c
Single Flange ..... " 1½c
Smith's Wro't Bracket, plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel 30%
Smith's Milled Steel 4½c

Sliding Door.
Painted iron.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.60
Garden.
Steel, braced.....80&10%
Steel, bow.....70c
Malleable Iron, heavy.....70&10&5

Hay.
Wood.....$1.40@$2 00

Lawn—Wood.
Common.....per doz. 2 35
Automatic ..... " 5 75
Gibbs'..... " 3 70
Jumbo, 36 teeth..... " 6 30

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned...70&10%
Nickel Plated.....70&10%
Electroplated, Brass, Bronze or Copper.....70&10%

RINGS

Bull.

Copper.....	2-in.	2½ in	3 in.
Per doz.....		$1.20	$1.60
Rea's Impro'd Self Piercing copper, pr d'z.		1.50	
Steel per doz..		.95	1.05
Nickel Plated		1.35	...

and Ringers—Hog.
Blair's Rings.....per doz. $0 60
Blair's Ringers..... " 85
Brown's Rings..... " 65
Brown's Ringers..... " 90
Champion Ringers... " 1 70
Hill's Ringers..... " 65
Hill's Ring, boxes..... " 45
Major Rings ..... " 80
Perfect Ringers..... " 95
Wolverine Rings..... " 1 50
Wolverine Ringers... " 70

Fruit Jar.
White.....per lb 30c

Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt .....50&5%
Coppered Iron 75%
Tinners' .....66⅔@10%
Hame .....per lb. $0 00
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¾, 5-16-in. Com. on reels..per lb. 12½c
¾, 5-16-in. Com. in coils .. " 13c
¾, 5-16 Imperial in coils . " 22c

Sewall & Day Sisal Rope.
Rates.....10½c

Sisal.
Eagle, rates.....per lb. 8½c

Pure Manila.
Rates..... " 12½c

RULES.

Boxwood.....60%
Ivory .....35&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's .....25&7½%
Jackson's.....25&7½%

Butchers'.
Disston's..... 35&7½%

Circular.
Disston's.....50%
Hiles'.....50&10%

Compass.
Common.....per doz. $1.35@$1.60
Disston's.....25&7½%

Cross-Cut.
Atkins'.....25%
Disston's..... 40&10% &50%
Pocahontas Bit.....per ft. 39c
Pocahontas, Blued....., " 41c

Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75

Hack.
Disston's.....25½%
Keystone.....30%

Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb. .....30&7½%
Keystone.....30&7½%
Sam Sickles', hand....per doz.$4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75

Keyhole—Disston's.....25&7½%

Kitchen.
Sterling.....25%

One Man 50%

Panel.
Brown's.....30&7½%
Disston's No. 7.....30&7½%
Disston's No. D100.....25&2½%
"I Will".....40%

Pruning.
Avery's Duplex.....25&7½%
Brown's.....25&7½%
Disston's.....25&7½%

Wood.
Common.....per doz. $4 50
Handy..... " 7 60
Happy Medium..... " 7 00
Wood Sawyers' Delight " 8 25

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted.... " 1 60

SCALES.

Counter.
Pelouze..... .....40&10%

Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 50

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 75
Triangular..... " 2 50

Cabinet.
Ajax.....per doz. $2 15
Cast Steel..... " 65c@75c
Stanley's No. 80..... " $11 50

Road.

Cubic ft.	7	5	3
Without runners, ea.	$1.15	3.90	3.65
With runners.... "	4.40	4.15	3.90

SCREWS.

Bench.
Iron ....50&5%
Wood, white maple..per doz. $3 60

Hand—Wood.....20%

Hand Rail.....70&10%

Jack .....75&10&10%

Lag or Coach—all sizes, gimlet pointed .....75&10%

Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	19c	22c	27c	32c	25c	27c

Wood.
F. H. Bright Steel.....87½, 10&10%
R. H. Blued Steel.....85&5%
F. H. Jap'd Steel.....82½&5%
F. H. Brass.....85&5%
R. H. Brass.....80&5%
R. H. Nickel Plated.....75%

SCYTHES.

Clipper, grain.....per doz. $8 12
Clipper, grass..... " 6 36

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
Square, Buck Bros.. " 1 30
Cup Point, knurled, pr. doz. 70c@$1.20
Rivet.
Farmers'.....per doz. $1 45
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch .. " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 4 25
Leach's..... " 4 80
Nashe's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.

Iron.....per doz. $1.35@$2.75
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

SHEARS.

Pruning.
Buckeye, No. 1.....per doz. $6 75
" No. 2..... " 8 40
California Pat., 9 in.. " 4 20
" " 10 in.. " 5 00
Draw Cut, No. 3..... " 14 75
" " No. 4..... " 17 50
Henry's Pat. 0 01 14 012
Per doz.....$1.90 $2.50 $3.15 $3.30
Star.....per doz. $4.75
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union..... per doz. $6.75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.
5-inch.....each 28c; per doz. $ 3.30
6 " ..... " 33c; " 3.90
60% discount to dealers on 2-inch, 3-inch and 4-inch plain, round and round corrugated shoes.

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No. 2 Ajax.....per doz. $5 25
No. 4 Golds..... " 6 25
Ames' new list.....Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Gold Hibbard's.....per doz. $9 25
C. H. Conover's..... " 7 75
Beckwith's..... " 7 75
Hickory..... " 6 25
Greenlea'r's..... " 5 75
Columbus..... " 5 00
Ames' new list.....Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $6 00
Long Handle..... " 5 00

SINKS.

Cast Iron.
Painted..... 50%
Enameled, White.....60-10&5%
Wrought Steel.
Painted, new list.....40 10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.

Double Ring, Bush.....per doz. $6 75
Patent Loop " .... " 7 30
" " Grass..... " 5 75

SNIPS, TINNERS'.

Hernisch's.....40&5%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.... 28c 33c 35c 40c
Reliance.
Per doz.....light $1.45; heavy $2.20
Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.25
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.

Steel and Iron.....75&5%
(Add for Bluing, $2.50 per doz., net)
Mitre.
Stanley's No. 12.....40%
Try.
Stanley's No. 20, new list...30&10%
" No. 12 and 14.....40%
Try and Bevel.
Stanley's.....40&5%
Try and Miter.
Fox's.....per doz. $6.75
Winterbottom's.....50%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Pearl, nickel plated..... " 1 30
Star, " " ..... " 1 60
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated .... " 4 50

STAPLES.

Blind.
Barbed.....per ℔ 9¼@9½c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 ℔ $2 20
Galvanized..... " 2 50
Netting.
Galvanized..... ...per 100 ℔ 3 70
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....85-10&5%
Extra heavy.....85&5%

STEELYARD.

Discount 25%

STONES.

Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $23 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6¼@6¾
Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita ..... " 26
Sythe.
Black Diamond.....per gro. $7 75
Clear Grit..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille ..... " 7 00
White Mountain..... " 6 50
Willoughby Lake..... " 6 25
Red End..... " 3 15

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50

STOPPERS, FLUE

Common.....per doz. $0 32
Crown ..... " 45
Gem, flat, painted..... " 72
Gem, cor'd, decorated.. " 65
Kirch's..... " 90
Peerless..... " 63
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's..... " 6 25

SWIVELS.

Malleable Iron.....per ℔ 6¼c
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut.....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&10%
Gimp.....90&35%
Upholsters' Cut.....90&40&5%
Upholsters' Wire.....90&35%
Double Pointed.....90&20%
Copper.....per ℔ 32c
Canvas Nails.....75&5%
Clout Nails .....75&5%
Hungarian Nails.....80&5%

TAPES, MEASURING.

Asses' Skin.....35%
Bend Leather.....15%
Patent Leather.....15%
Lufkin's Steel.....25%
Lufkin's Metallic.....25%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 0

TIES.

Bale.
Single Loop.....80&10%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Atkins' Dexter.....per doz. $4 50
Atkins' Excelsior..... " 6 50
Disston's Universal.....40%
Minature.
Smith & Hemenway 25%

TRAPS.

Fly.
Balloon.....per doz. $1 10
Harper's..... " 1 20
Game.
Newhouse.....50%
New Victor.....75&5%
Mole.
Reddick's.....per doz. $5 60
Mouse and Rat.
Wood Choker.....per hole $0 11
Tin Choker..... " 08
Delusion.....per doz. 85
Imitation Sight, Rat. " 80
Marty Rat..... " 6 75
Marty Rat Imitation.. " 3 75
Marty Mouse..... " 3 12
Marty Mouse Imitation " 2 10
French Automatic.....each 3 60

TROWELS.

Brick.
Standard.....30%
Brade's.....10&5%
Disston's.....30%
Rose's.....30%
Plasterers.
Standard.....33⅓%
Disston's.....30%
W. & McP.....25%

TRUCKS.

Bags.....each $1 70
Handy..... " 1 50
Warehouse.....60&5%
No..... 1 2 3
Half Ironed.... $2.65 $3.40 $5.00
Full Ironed.... 3.90 5.75 6.75

TUBS, WASH.

Standard.
Nos..... 3 2 1 Ex. large
Per doz.... $4.75 $5.65 $6.50 $ 8.75
Dowell.
Per doz.... 5.60 6.65 7.50 10.00
Cedar.
Per doz.... 6.50 7.50 8.25 11 50
Indurated.
Per doz.... 7.20 7.95 9.45 11.70
Galvanized.
No..... 1 2 3
Per doz.....$5.25 $5.75 $6.50

TWINE.

Per ℔
3-ply Cotton Wrapping.....19c
4 " " " 19c
4 " " Extra Wrappings.....24c
4 " " " Hvy. Wrappings.22c
4 " " Wrapping on tubes...24c
3 " " " " cones...21c
4 " " " " " ...21c
India Hemp, ½-lb. balls.....18c
" " ¼-lb. " 17c
" " ⅛-lb. " .....doz. 65c
2-ply " ½-lb. " 12c
3-ply " ½-lb. " 11c
Jute Wrappings, ½-lb. balls.....12c
Jute Wool, 1-℔. balls.....6c
Seine.
Nos..... 6 9 12 15+
Soft, per ℔ 24½ 22 21 20½
Med. " 22 21 20½
Hard " 23½ 22½ 22½
Staging, ½-lb. ball, size 21.....21½c
" " " " 24.....21c
" " " " 27.....21c
Bagging " " 22c
3-ply "B" in hanks.....19c
4 " "B" " 19c
3 " "A" " 29c
3 " Silver Finish, in hanks....39c
Fodder or Lath.
130-strand 7½c
200-strand.....8½c

VISES.

Bonney's.....25%
Cheney's.....20%
Parker's Oval Slide.....
.....50, 10, 2½% @ 50 10, 5, 2½%
Parker's Parallel.....15&20%
Parker's Victor.....10%
Parker's Combination.....65%
Solid Box.....60&5%
Adam's Mechanics'.....each 2 65
Williamson Universal.....40%

WARE.

Cast-Iron Hollow.
Ground.....50&10%
Unground .....60&5%
Extra Finished.....40&10
White Enameled.....40, 10&5%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:

In.	⅜	½	⅝	¾	⅞	1
	7½c	5½c	4c	3½c	3½c	3½c	3½c

Wrought steel in 5 ℔. boxes, per ℔.

In.	¼	⅜	½	⅝	¾	⅞	1
	8½c	6½c	5c	4½c	4½c	4½c	4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz....30c
Galling .....per ℔ 10½c
Saw ..... " 8½c

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz ..... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz..... 3 10 and 4 15

WEIGHTS.

Hitching ....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $21 00

WHEEL BARROWS.

Common Railroad....per doz..$15 50
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Favorite Steel Tray.. " .. 25 00
No. 04 Steel Dirt.... " .. 47 00
No. 04½ " " .... " .. 50 00

WHEELS.

Corundum .....70&10&5%
Emery .....75&5%
Welt in. 8 10 12 14
Per doz.....$1.90 $2.20 $3.00 $5.50

WIRE.

Barbed	Painted.	Galv'd.
Carloads..per 100 lbs..	$2.10	$2.40
Less than car " ..	2.10	2.40

Brass.
In coils.....20%
In 1 ℔ spools, new list.....50&10%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
In 1 ℔ spools, new list 50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd; pr 100 lbs. $1.95
Nos. 6 to 9, Galvl'd... " 2.25
Hair—New list.....50&10%
Market.
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles 70%
Coppered, broken bdles.....65&10%
Tinned, full bdles..... 70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 ℔. spools. .....per ℔..26c
Plain—Small lots..... $2.00
Car lots 1.95
Small spools 5c per hundred higher.

WRENCHES.

Acme Standard..... .60%
Alligator .....70&10%
Always Ready..... 50%
Bemis & Call No. 2 Improved Pipe Wrenches 60%
Coe's Standard.....40&10%
Girard's Agricultural.....75&50%
Wescott's "S".....33⅓%
Malleable "S".....per ℔. 05½c
Malleable..... " 05½c
Stillson Pipe.....60&5%
Trimo " 60%

WRINGERS.

Clothes.
No. 22, Guarantee....per doz.$29 50
No. 110, Guarantee.... " 29 50
No. 110, Brighton..... " 18 00
No. 22, Pioneer..... " 18 00
No. 2, Superb..... " 17 50
No. 730, Easy..... " 24 00
No. 500, Royal ..... " 26 00
No. 350, Universal.... " 23 50
No. 300, Novelty..... " 23 50
No. 310, Keystone .. " 22 50
No. 100, Rival ..... " 19 00

ADVERTISERS' INDEX.

ALPHABETICAL LIST.

American Lock Nut Co. 61
Asphalt Ready Roofing Co. 60
Atkins, E. C. & Co. 72
Atlas Bolt & Screw Co 1
Atlas Mfg Co. 72
Auld & Conger Co. 61
Avery Stamping Co. 68
Baker-McMillen Co. 67
Barnett, G. & H. Co 1
Bayard, J. L. 51
Beckman Bros. 68
Beckwith, Estate of P. D 24
Benbow-Brammer Mfg. Co. 65
Berger Bros. Co 57
Berger Mfg. Co. 57
Bergstrom Stove Co 15
Bertsch & Co 61
Black Silk Stove Polish Wks. 52
Blick-Williams Co. 65
Bommer Bros. 1
Born Steel Range Co. 8
Bostwick Steel Lath Co. 57
Boynton Furn. Co 11
Brammer, H. F. Mfg. Co 65
Brauer, A. G. 55
Bridgeport Chain Co 1
Bridgeport Crucible Co 52
Brucker, M. 55
Burgess Soldering Furn. Co. 62
Burton, W. J. Co 60
Cahoone Co., The 4
Canton Steel Roofing Co 58
Chapin-Stephens Co 67
Chicago Brass Co 58
Clark, Quien & Morse 66
Clayton & Lambert Mfg. Co. 63
Cole Mfg. Co. 9
Colebrook & Sons 15
Columbus Bolt Works 1
Conductor Fitting Co 63
Connors, Wm. Paint Mfg. Co 1
Cooney & Geiger 72
Cope, Geo. W. Pattern Works 54
Cortright Metal Roofing Co. 61
Craig-Reynolds Fdy. Co. 11
Denning Wire & Fence Co. 62
Detroit Heating & Lighting Co. 16
Deuscher, H. P. Co. 16
Dieckmann, Ferd. 53-71
Diener, Geo. W. Mfg. Co. 62
Disston, Henry & Sons 63
Dixon, Jos. Crucible Co. 51
Duby & Shinn 66
Eller, J. H. & Co. 56
Ely Mfg. Co. 68
Emmelmann Bros. Mfg. Co 63
Enterprise Mfg. Co. 72
Enterprise Mfg. Co. of Pa. 70
Exhibit Trading Co. 72
Fanner Mfg. Co. 54
Ferrosteel Co. 21
Follansbee Bros. Co. 72
Forest City Fdy. & Mfg. Co. 10
Foster Stove Co 5
Franklin Specialty Co. 68
Friedley & Voshardt 60
Garland Nut & Rivet Co. 62
Garry Iron & Steel Co. 56
Gem City Stove Co. 2
Globe Machine & Stamping Co. 62
Globe Stove & Range Co. 3
Globe Ventilator Co. 72
Grand Rapids Hand Screw Co. 66
Green Fdy. & Furnace Works 16
Harrington & King Perforating Co 61
Haynes-Langenberg Mfg. Co. 13
Heller & Co., W. C. 20
Henry & Scheible Co 13
Hill Dryer Co. 68
Hoffman, Geo. W. 14
Hooper, C. N. 68
Hotchkiss, E. S. 58
Illinois Roofing & Supply Co. 72
Independent Mfg. Co 14
Iron, Hardware & Mercantile Agency. 22
Iwan Bros 67
Johnson, E. J. & Co. 60
Joliet Stove Works 5-9
Kanneberg Roofing & Ceiling Co. 56
Kees, F. D. 69
Keferstein, H. O. 52
Keighley Met. Ceil. Co 56
Keith Furn. Co. 19
Kellogg-Mackay-Cameron Co. 8
Kelsey Heating Co. 10
Kimball Bros. Co 52
Kinne Mfg. Co. 19
Kinsey Mfg. Co. 62
Kontny, John 11
Kramer Bros. Fdy. Co. 52
Kruse & Dewenter 15
La Crosse Steel Roofing Co 60
Lawler Regulator Co. 23
Lee-Glass-Andreesen Hdw. Co. 71
Lenawee Mfg. Co. 68
Lennox Furn. Co. 18
Litchfield, J. M. 62
Lufkin Rule Co. 66
Mannen & Esterly Co. 64
Manufacturers' Stove Repair Co 54
March-Brownback Stove Co. 15
McClure Co. 72
Merchant & Evans Co. 58
Meyer Furn. Co. 17
Monroe Fdy. & Furn. Co 16
Morris, J. L. Stove Repair Co. 54
Mueller, L. J. Furn. Co. 12-20
Munsell, Eugene & Co. 6
National Sheet Metal Roofing Co 57
Newport Sand Bank Co 55
Niagara Machine & Tool Works 62
Nickel Plate Stove Polish Co. 55
North Bros. Mfg. Co. 67
North Western Stove Repair Co. 54
Nye & Son 8
Obermayer, S. Co. 52
O'Halloran & Jacobs 60
Ohio Tool Co. 66
Oneida Community 1
Osgood Scale Co 72
Peck, C. A. Hdw. Co 65
Peters Cartridge Co. 71
Piaget Novelty Co. 69
Pittsburgh Stove & Range Co. 2
Plume & Atwood Mfg. Co. 58
Portsmouth Stove & Range Co. 4
Powers Bros. 72
Pullman Mfg. Co. 69
Quincy Pattern Co. 54
Reeves Mfg. Co. 21
Reeves, S. V. 54
Remington Typewriter Co 14
Resor & Co., Wm. 6
Robinson Furn. Co 18
Rochester Radiator Co. 20
Rulofson Co., A. C. 69
St. Paul Roofing, Cornice & Ornament Co. 60
Sayre Stamping Co. 55
Schofield & Co. 52
Schreiber-Conchar Mfg. Co 19
Schultz, Wm. T. 51
Schwab & Sons Co. 18-20
Security Lightning Rod Co. 61
Shaw, Walker Co. 54
Signal Mail Box Co. 65
Silver & Co. 14
Silver Leaf Stove Polish Co. 54
Smith & Hemenway Corp., Ltd 54-66
Smith Bros. Mfg. Co. 64
Smith, Chas. Co. 20
Sperry, D. R. & Co. 69
Stanley Rule & Level Co. 68
Stanton Heater Co. 17
Sterling Air Radiator Co. 23
Sterling Fdy. Co. 63
Stowell Mfg. Co. 60
Stowell Mfg. & Fdy. Co 23
Stuber & Kuck 66
Taplin Mfg. Co. 69
Taylor & Boggis Fdy. Co. 69
Titchener & Co. 61
Tuttle & Bailey 20
20th Century Mfg. Co. 68
Union Stove Works 12
U. S. Register Co., Ltd 21
Vedder Pattern Works 54
Victor Stamping Co 67
Voss Bros. Mfg. Co. 65
Walker Tool Co. 61
Walworth Run Fdy. Co. 17
Ward-Dickey Steel Co. 59
Waterloo Register Co. 21
Weiss, H. & Co 61
Weller Pattern Co. 54
Wheeling Corrugating Co. 59
Whitacre Mfg. Co., J. E. 52
White Lily Washer Co 65
White Stove Co. 7
Willard, Wm. G 6
Williams Stove Lining Co. 55
Youngstown Furn. & Supply Co. 19

CLASSIFIED LIST.

Ash Sifters

Hill Dryer Co., Worcester, Mass

Augers—Post Hole

Iwan Bros., Streator, Ill

Benches—Carpenter

Grand Rapids Hand Screw Co., Grand Rapids, Mich

Bolts

Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Wks., Columbus, O

Brass

Chicago Brass Co., Chicago
Merchant & Evans Co., Philadelphia, Pa
Plume & Atwood Mfg. Co., Chicago, Ill

Cabinets—Index

Shaw-Walker Co., Chicago

Cans

Stuber & Kuck, Peoria Ill

Carpenters' Tools

Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., N. Britain, Ct

Cartridges

Peters Cartridge Co., Cincinnati, O

Castings

Taylor & Boggis Fdy. Co., Cleveland, O

Ceilings—Metal

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Friedley & Voshardt, Chicago, Ill
Illinois Roofing & Supply Co., Chicago, Ill
Kanneberg Roofing & Ceiling Co., Canton, O
Keighley Met. Ceiling Co. Pittsburg, Pa
Mullins Co., W. H., Salem, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugat'g Co., Wheeling, W. Va

Cement Tools

Kramer Bros. Fdy. Co., Dayton, O

Chains

Bridgeport Chain Co., Bridgeport, Ct
Oneida Community, Oneida, N.Y

Chimney Tops

Iwan Bros., Streator, Ill
Kramer Bros. Fdy. Co., Dayton, O
Sterling Fdy. Co., Sterling, Ill

Clippers

Hotchkiss, Edward S., Bridgeport, Ct

Clothes Dryers

Hill Dryer Co., Worcester, Mass
Mannen & Esterly, Cleveland, O

Coal Hods

Victor Stamping Co., Cleveland, O

Coffee Mills

Enterprise Mfg. Co. of Pa., Philadelphia, Pa

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa
Iwan Bros., Streator, Ill

Conductor Pipe

Berger Bros. Co., Philadelphia, Pa
Berger Mfg. Co., Canton, O
Bostwick Steel Lath Co., Niles, O
Clark, Quien & Morse, Peoria, Ill
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wells & Nellegar Co., Chicago, Ill

Copper

Chicago Brass Co., Chicago
Merchant & Evans Co., Philadelphia, Pa
Plume & Atwood Mfg. Co., Chicago, Ill

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co., Canton, O
Eller, J. H. & Co., Canton, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Dreis & Krump, Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Corrugated Iron

Bostwick Steel Lath Co., Niles, O
Garry Iron & Steel Co., Cleveland, O

Cream Separators

Smith Bros. Mfg. Co., Indianapolis, Ind

Cut Offs—Rain Water

Conductor Fitting Co., Marietta, O
Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis
Wheeling Corrugating Co., Wheeling, W. Va

Cutlery

Ohio Tool Co., Columbus, O
Smith & Hemenway, Corp., Ltd. New York

Dampers

Dust, Wm. T. & Co., Detroit, Mich
Sayre Stamping Co., Sayre, O

Dies

Globe Mch. & Stamp Co., Cleveland, O

Door Hangers

Stowell Mfg. & Fdy. Co., South Milwaukee, Wis

Drain Cleaners

Iwan Bros., Streator, Ill

Eaves Trough

Bostwick Steel Lath Co., Niles, O
Eller, J. H. & Co., Canton, O
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Whitacre Mfg. Co., J. E., Rockford, Ill

Egg Beaters

Taplin Mfg. Co., New Britain, Ct

Elbows—Conductor Pipe

Bostwick Steel Lath Co., Niles, O
Dieckmann, F., Cincinnati, O
Wheeling Corrugated Co., Wheeling, W. Va.

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Faucets

Litchfield, J. M., New York, N.Y

Fencing

Denning Wire & Fence Co., Cedar Rapids, Ia

Files

Barnett, G. & H. Co., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Flue Stoppers

Stuber & Kuck, Peoria, Ill

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Foundry Supplies

Obermayer, S. Co., Cincinnati, O

Fuel—Incandescent

Williams Stove Lining Co., Taunton, Mass

Furnaces—Hot Air

Beckwith, Estate, P. D. Dowagiac, Mich
Bergstrom Stove Co., Neenah, Wis
Boynton Furnace Co., New York, N. Y
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Deuscher, H. P. Co., Hamilton, O
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co., St. Louis
Henry & Scheible Co., Cleveland, O
Keith Furn. Co., Des Moines, Ia
Kelsey Heating Co., Syracuse, N. Y
Kontny, John, Chicago, Ill
Kruse & Dewenter, Indianapolis, Ind
Lennox Furnace Co., Marshalltown, Ia
Mannen & Esterly Co., Cleveland, O
March-Brownback Stove Co., Pottstown, Pa
Meyer Furn. Co., Peoria, Ill
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Robinson Furn. Co., Chicago, Ill
Schwab & Sons Co., Milwaukee, Wis
Smith, Chas. Co., Chicago, Ill
Stanton Heater Co., Martins Ferry, O
Union Stove Works, New York, N.Y
Youngstown Furn. & Supply Co., Youngstown, O

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ill
Meyer, F. & Bro. Co., Peoria, Ill
Mueller, L. J. Furn. Co., Milwaukee, Wis

Furnace Repairs

Dust, Wm. T Co., Detroit, Mich
Morris Stove Repair Co., Chicago, Ill
Northwestern Stove Repair Co., Chicago

Furnace Rings

Walworth Run Fdy. Co., Cleveland, O

Galvanized Tubs and Pails

Wheeling Corrugating Co., Wheeling, W. Va

Hammers

Franklin Specialty Co., Reading, Pa

Hand Screws

Grand Rapids Hand Screw Co., Grand Rapids, Mich

Hangers—Trouser

Pullman Mfg. Co., Rochester, N.
Taplin Mfg. Co., New Britain, Conn

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha

Hatchets
Franklin Specialty Co., Reading, Pa

Hay Carriers
Porter, J. E., Ottawa, Ill
Stowell Mfg. & Fdy. Co., Milwaukee

Hay Knives
Ely Mfg. Co., Girard, Pa

Heaters—Steam and Hot Water
Boynton Furn. Co., New York
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Haynes-Langenberg Mfg. Co., St. Louis
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis

Hinges—Spring
Bommer Bros., Brooklyn, N.Y

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hot Water Attachments
Smith Co., Chas., Chicago, Ill

Household Inventions
Silver & Co., Brooklyn, N.Y

Ice Cream Freezers
North Bros. Mfg. Co., Philadelphia, Pa

Ice Picks
Franklin Specialty Co., Reading, Pa

Kitchen Utensils
Avery Stamping Co., Cleveland, O
Silver & Co., Brooklyn, N.Y
Taplin Mfg. Co., New Britain, Ct

Knives—Pocket
Keferstein, H. O., Barberton, O

Lanterns
Berger Mfg. Co., Canton, O

Levels
Baker-McMillen Co., Akron, O
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., New York, N.Y
Stanley Rule & Level Co., New Britain, Ct

Lightning Rods
Security Lightning Rod Co., Burlington, Wis

Lighting Systems
Detroit Heating & Lighting Co., Detroit, Mich

Locks
Taylor & Boggis Fdy. Co., Cleveland, O

Mail Boxes
Blick-Williams Co., Indianapolis, Ind
Peck, C. A., Hdw. & Mfg. Co. Berlin, Wis
Signal Mail Box Co., Joliet, Ill
Smith Bros. Mfg. Co., Indianapolis, Ind

Meat Choppers
Smith & Hemenway, Corp., Ltd. New York
Enterprise Mfg. Co. of Pa., Philadelphia, Pa

Metal Lath
Wheeling Corrugating Co., Wheeling, W. Va
Bostwick Steel Lath Co., Niles, O

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City

Mica
Brauer, A. G., St. Louis, Mo
Dust, Wm. T. Co., Detroit, Mich
Morris Stove Repair Co., Chicago, Ill
Munsell, Eugene & Co., New York, N.Y

Miters
Whitacre Mfg. Co., J. E., Rockford, Ill

Molding Sand.
Newport Sand Bank Co., Newport, Ky

Mops
Ely Mfg. Co., Girard, Pa

Nail Pullers
Smith & Hemenway, Corp., Ltd. New York

Nuts
American Lock Nut Co., Oregon, Ill
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus O
Garland Nut & Rivet Co., Pittsburgh, Pa.

Oil Cans
Cooney & Geiger, Indianapolis, Ind

Pails—Milk
Lechner, Fred. W., Wenona, Ill

Paints
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Planes
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., New Britain, Ct

Posts—Steel Fence
Avery Stamping Co., Cleveland, O

Pumps
Beckman Bros., Des Moines, Ia
Berger Mfg. Co., Canton, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich
Weiss, H. & Co., New York, N.Y

Rasps
Disston, Henry & Sons., Philadelphia, Pa

Registers
Ferrosteel Co., Cleveland, O
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schreiber & Conchar Mfg. Co., Dubuque, Ia
Schwab & Sons Co., Milwaukee, Wis
Stowell Mfg. & Fdy. Co., Milwaukee, Wis
Tuttle & Bailey, New York, N.Y
United States Register Co., Battle Creek, Mich
Walworth Run Fdy. Co., Cleveland, O
Waterloo Register Co., Waterloo, Ia

Roofing—Asphalt
Asphalt Ready Roofing Co., New York
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
Berger Mfg. Co., Canton, O
Bostwick Steel Lath Co., Niles, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
Kanneberg Roofing & Ceiling Co., Canton, O
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Reeves Mfg. Co., Canal Dover, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Roofing Cement
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Garry Iron & Steel Co., Cleveland, O

Roof Paint
Conners, Wm. Paint Mfg. Co. Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O
Stowell Mfg. Co., Jersey City, N.J

Rules
Chapin-Stephens Co., Pine Meadow, Ct
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

Sad Irons
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Schreiber & Conchar Mfg. Co., Dubuque, Ia

Saving Boxes
Piaget Novelty Co., New York, N.Y

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Saw Handles
Ely Mfg. Co., Girard, Pa

Saw and Saw Sets
Atkins, E. C. & Co., Indianapolis, Ind
Disston, Henry & Sons, Philadelphia, Pa

Scales
Beckman Bros., Des Moines, Ia
Osgood Scale Co., Binghamton, N.Y

Screen Door Check
Pullman Mfg. Co., Rochester, N.Y

Screen Hinges
Kees, F. D., Beatrice, Neb

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screens—Radiator
Harrington & King Perforating Co. Chicago, Ill

Screws
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus, O

Screws—Hand
Chapin-Stephens Co., Pine Meadow, Ct
Grand Rapids Hand Screw Co., Grand Rapids, Mich
Ohio Tool Co., Columbus, O

Screw Drivers
Hurwood Mfg. Co., Bridgeport, Ct
North Bros. Mfg. Co., Philadelphia, Pa
Smith & Hemenway, Corp., Ltd. New York

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheet Metal Specialties
Friedley & Voshardt, Chicago, Ill
Kinne Mfg. Co., Minneapolis
Kinsey Mfg. Co., Dayton, O
Mullins Co., W. H., Salem, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Sheets—Black and Galvanized
Berger Mfg. Co., Canton, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Planished
Ward-Dickey Steel Co., Indiana Harbor, Ind

Shelf-Brackets
Atlas Mfg. Co., New Haven, Ct

Shelving—Hardware
Heller & Co., Mont Clair, N. J

Shovels
Avery Stamping Co., Cleveland, O

Sifters
Stuber & Kuck, Peoria, Ill

Skylight Gearing
Weiss, H. & Co., New York, N.Y

Slate
Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y
O'Halloran & Jacobs, Pittsburgh, Pa

Soldering Coppers
Chicago Brass Co., Chicago, Ill
Plume & Atwood Mfg. Co., Chicago, Ill

Soldering Furnaces
Burgess Soldering Furn. Co., Columbus, O
Diener, Geo. W. Mfg. Co., Chicago
Clayton & Lambert Mfg. Co., Detroit

Soldering Irons
Emmelman Bros. Mfg. Co., Indianapolis

Sporting Goods
Enterprise Mfg. Co., Akron, O

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, New York City, N.Y
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal
Avery Stamping Co., Cleveland, O
Globe Machine & Stamping Co., Cleveland, O

Staples
Titchener & Co., Binghamton, N.Y

Stoves and Steel Ranges
Beckwith, P. D. Estate, Dowagiac, Mich
Bergstrom Stove Co., Neenah, Wis
Born Steel Range Co., Cleveland, O
Cahoone Co., New York, N.Y
Cole Mfg. Co., Chicago
Foster Stove Co., Ironton, O
Gem City Stove Co., Dayton, O
Globe Stove & Range Co., Kokomo, Ind
Joliet Stove Works, Joliet, Ill
Kontny, John, Chicago, Ill
March-Brownback Stove Co., Pottstown, Pa
Nye & Son, Marietta, O
Pittsburgh Stove & Range Co. Pittsburgh, Pa
Resor & Co., Wm., Cincinnati, O
Reeves, S. V., Philadelphia, Pa
Toledo Stove & Range Co., Toledo, O
Union Stove Works, New York, N.Y
Willard, Wm. G., St. Louis, Mo

Stoves—Gas
Fanner Mfg. Co., Cleveland, O
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Ringen Stove Co., St. Louis, Mo
White Stove Co., Thomas, Quincy, Ill

Stoves—Oil
Litchfield, J. M., New York, N.Y
Ringen Stove Co., St. Louis, Mo
Silver & Co., Brooklyn, N.Y
Taylor & Boggis Fdy. Co., Cleveland, O

Stove Carriers
Kramer Bros. Fdy. Co., Dayton, O

Stove Casters
Kramer Bros. Fdy. Co., Dayton, O

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay
Bridgeport Crucible Co., Bridgeport, Ct

Stove Lifters
Kramer Bros. Fdy. Co., Dayton, O

Stove Lining
Williams Stove Lining Co., Taunton, Mass

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cope Pattern Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Kinne Mfg. Co., Minneapolis
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Stove Pipe Radiators
Rochester Radiator Co., Rochester, N.Y
Sterling Air Radiator Co., Chicago

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago
Silver Leaf Stove Polish Co., Indianapolis, Ind

Stove Repairs
Brauer, A. G., St. Louis, Mo
Brucker, M., Chicago
Dust, Wm. T. Co., Detroit, Mich
Kramer Bros. Fdy. Co., Dayton, O
Manufacturers' Stove Repair Co., Chicago
Morris, Stove Repair Co., Chicago, Ill
North Western Stove Repair Co., Chicago
Reeves, S. V., Philadelphia, Pa

Stove Trimmings
Fanner Mfg. Co., Cleveland, O

Sugar Kettles
Sperry & Co., Batavia, Ill

Tanks—Oil and Gasoline
Smith Bros. Mfg. Co., Indianapolis, Ind

Tapes
Lufkin Rule Co., Saginaw, Mich

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinplate
Berger Mfg. Co., Canton, O
Canton Steel Roofing Co., Canton, O
Eller, J. H. & Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
Illinois Roofing & Supply Co., Chicago, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha
McClure Co., Philadelphia, Pa
Merchant & Evans Co., Philadelphia, Pa

Tinware
Stuber & Kuck, Peoria, Ill

Toasters
Rulofson Co., A. C., San Francisco

Toilet Paper Holders
Franklin Specialty Co., Reading, Pa

Trowels
Atkins & Co., Indianapolis, Ind
Disston, H. & Sons, Philadelphia, Pa

Tubs and Pails
Wheeling Corrugat'g Co., Wheeling, W. Va

Typewriters
Remington Typewriter Co., Chicago

Ventilators
Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros., Streator, Ill

Washing Machines
Benbow-Brammer Mfg. Co., St. Louis, Mo
Blackstone Mfg. Co., Jamestown, N.Y
Brammer, H. F. Mfg. Co., Davenport, Ia
Clark, Quien & Morse, Peoria, Ill
Voss Bros. Mfg. Co., Davenport, Ia
White Lily Washer Co., Davenport, Ia

Windows
Mullins Co., W. H., Salem, O

Wire Anchors
Lenawee Mfg. Co., Adrian, Mich

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
Titchener & Co., Binghamton, N.Y

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

Wanted—Some little article to manufacture during the winter months; something that can be made by a tinner in a tin shop. Would like to correspond with some one that is in want of something of the kind. Columbus Hardware Co., Columbus, Wis. 13

For Sale—An $8,000 stock in general hardware, in an 8,000 county seat town in the best county in southern Kansas; stock clear; business good and crops the best ever known. Address "Bargain," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13

For Sale—Or will exchange for clear farm land, $6,000 stock of hardware with tinners' tools and fixtures; good location. Address "Land," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13

For Sale—Hardware stock and tinners' tools of the late J. S. Dewey. Price, $1,800, cash down; including building and lots, $3,000. This is the finest opening in the state for a good tinner. Address Mrs. J. S. Dewey, Oakdale, Nebr. 12

For Sale—Hardware, stoves, paints, etc. Clean up-to-date stock and fixtures about $3,500; small town in rich farming country in Wisconsin; only stock in town. Store 20x70; warehouse 24x40; low rent; other business in view. Address "Wisconsin," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 12

For Sale—Stock of hardware of about $10,000 in a good lively town with a good country surrounding; one of the best locations in the city; located in a room 25x120, with basement. Anyone interested please address Winslow Mer. Co., Box 186, Livingston, Mont. 11

Wanted—A second-hand outfit of either the Werner or Riverside store fixtures. Write what you have and prices on same. Address M. Bergan & Bro., Manhattan, Ill. 11

For Sale—Stock of hardware less than a year old, and new store building in new growing town in South Dakota; best farming country surrounding; will rent building; must sell on account of poor health. Address "Best," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 10

For Sale—Hardware store at invoice of stock for $4,000. Only hardware store in town of 4,000 people. Hardware business active, twenty-four houses under construction in town at present. Within 20 miles of Chicago. Low rental. Good tinshop goes with place. Reason for selling, owners wish to retire. Address "Illinois," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10

TINNER'S TOOLS.

FOR SALE—One set P. S. & W. Co., 31 inch square shears; will cut No. 20 iron; less than two months used; practically new; reason for selling, have two sets. E. D. Clark & Co., 85 Randolph St., Chicago. 13

For Sale—6 ft. cornice brake (old) $25; Queen City groover (good) $15; heavy punch and shear (old) $15. E. L. Colby, Rogers Park, Ill. 13

Wanted—One 30-inch squaring shears, one 30-inch sheet iron folder, one hollow mandrel, one stove pipe beader and crimper. Address B. Harms, Flanagan, Ill. 12

Wanted.—One pair second-hand, thirty-inch squaring shears. Address O. R. Gates, Independence, Ia. 9

HELP WANTED.

Wanted—A good steady man experienced in tin work, plumbing and furnace work. Steady job to the right man. Wages $15.00. Address John Horst, Madison, Neb. 13

Wanted—A first-class all around tinner, good wages and steady work. Must be steady, sober and reliable; give particulars. Box B. B., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13

Wanted — An experienced hardware clerk, must be a hustler and a good salesman, honest and systematic. A good opportunity for the right man. Address "Right," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13

Wanted—A good tinner, furnace and general shop worker. State salary and experience. A good job for a good sober man. L. F. Schroeder, Byron, Ill. 13

Wanted—First-class tinner who can figure, put in furnaces, work in windmill and do pump work when not busy in shop; must be sober at all times. Steady job to right man. Address Lock Box 262, Wellman, Ia. 13

Wanted—Tinner; good job for good man. Steady work the year round. Good wages. King & Vierck, 330 East State St., Rockford, Ill. 13

Wanted—At once, an all around tinner; state wages and experience. Fichtenmueller Bros., Farmington, Ia. 13

Wanted—At once, a good all around tinner, gas fitter and plumber. To a good, sober, industrious man will pay good wages, and steady work. Send reference and state wages. Address "Good," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13

Wanted—At once, tinner and plumber for country shop; man who can clerk in store when required. Married man who wants a steady job preferred. State experience and wages. A. E. Kromer & Co., Manton, Mich. 13

Wanted—Two good all around tinners to work on metal ceilings and roofing. Good wages. Hoernel Hardware Co., Racine, Wis. 13

Wanted—Tinner; good general man for country; must understand furnace work and guttering work. John Blaser, La Grange, Ill. 13

Wanted—A good tinner; must also understand plumbing and heating work. Will be a steady job. Wages from $75.00 to $90.00 per month to the right man; only good men need apply. Arps Bros. Hardware Co., Ouray, Colo. 13

Wanted—A young man at once who understands installing furnaces and some knowledge of pipe work. Wages, 30c per hour. Need no reference but wants to be sober when at labor. Address Albert W. Lichtfeld Bros., Libertyville, Ill. 13

Wanted—Salesman visiting stove and hardware trade to handle as a side line on commission an article selling for $4.25. Ready seller. Address Central Foundry Co., Detroit, Mich. 12

Wanted—A good tinner and furnace man; steady job to the right man. Address J. T. Crampton, Aurora, Ill. 12

Wanted—At once, first-class cornice makers; steady job for two or three first-class men. Address Messenger & Parks, Aurora, Ill. 12

Wanted—Experienced tinner; must understand furnace work; steady employment to good man; must be strictly temperate; state experience and wages wanted; references required. Address D. C. Purdy & Sons, Highland Park, Ill. Suburb of Chicago. 12

Wanted—At once; first-class tinner and furnace man. One who can install hot air furnaces. Man with some knowledge of plumbing preferred. Steady job; state wages and experience. Address The Iola Hdw. Co., Iola, Wis. 12

Wanted—First-class job workman and furnace hand; good steady job for a sober and reliable man. Position in Chicago. Address "F. K.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 12

Wanted—At once, first-class furnace man who also understands other tin and galvanized iron work. Good wages to sober steady man. Address Albert B. Guenther, Owensboro, Ky. 12

Wanted—Traveling hardware salesman, in all territory, to sell the "Best Chimney Cap;" well advertised; sells on sight and is sure repeater. Good commission to hustler with references. Address Sterling Foundry Co., Sterling, Ill. 12

Wanted—Immediately, first-class tinner for steady job the year around; state age and wages required in first letter. Address O. Woods, Morrison, Ill. 12

SITUATIONS WANTED.

Wanted—A position by a first-class tinner, can do any kind of inside or outside tin shop work. Can clerk in hardware store, too. Very anxious to get steady job. Julius Deering, 425 West Market St., Winona, Minn. 13

Wanted—Steady position as tinner; can do furnace and pipe work; am well acquainted with the hardware business; can speak German and would prefer to work in Iowa, Minnesota or Dakota. Address "Answer," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13

Wanted—Steady position as tinner. I am 39 years old; married and strictly sober; have had 21 years' experience. Can do all kinds of tin and sheet iron work and hot air heating; can estimate from plans; have been foreman in the leading shops. Would like a position along the 'Frisco R. R. or Iron Mountain R. R. in Missouri. Address "H. M.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 12

SPECIAL NOTICES.

WANTED

Position as Traveling Salesman in Illinois or Wisconsin for a reputable stove manufacturing company with an up-to-date trademark line. Strictly on commission. Address "Competent," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. Ill. 6t 13

WANTED

A good selling side line to the retail and wholesale hardware and wire fence trade.

C. F. SMITH & CO.

1t-13 223 Main St., DeKalb, Ill.

FOR SALE.

Dirt cheap, one 200 light Eagle Acetylene Generator, in good order. Address

WATERLOO STORAGE & TRANSFER CO.,
901 Commercial St.,
4t 13 Waterloo, Iowa.

FOR SALE.

One entirely new 3x31 in. Bertsch & Co. make single-geared roll for $58.00.

One 30 in. Farwell Molding Press, plain top, portable, with double tool shelf and long side shelf, used only a short time, $25.00.

M. HERTENSTEIN CO.,
3t 13 Columbus, Ohio.

WANTED

Wood Pattern Makers on Stove work. Address "Pattern Maker," care of AMERICAN ARTISAN.

u. f. n.

WANTED

Foreman for shop employing twenty men doing tin work, cornice work, slate roofing, plumbing, furnace, steam and water heating; city of 40,000 population, 50 miles from Chicago: old established firm. Address Box 910, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2t 11

WANTED

On or before January 1st, 1906, several first-class salesmen to represent a leading maker of furnaces and boilers. Permanent position at good salary to right men. Address S. S. care AMERICAN ARTISAN, 69 Dearborn St., Chicago. u.f.n.

RECEIVER'S SALE

Notice is hereby given that the undersigned receiver of the

PROPERTY AND ASSETS OF THE STAR SHOVEL AND RANGE COMPANY,

an insolvent corporation, will, on the Eighth day of November, 1905, between the hours of 9 o'clock a. m. and 4 o'clock p. m., at the plant of the company at the corner of Eleventh and Nicholas Streets, in the City of Vincennes, State of Indiana,

OFFER FOR SALE TO THE HIGHEST AND BEST BIDDER,

all the real estate, manufacturing plant, fixtures, and personal property consisting of shovels and stoves and other articles used in and about the manufacture of shovels and stoves, belonging to said company. Said sale will be made pursuant to an order given by the Knox Circuit Court of Knox County in the State of Indiana.

TERMS OF SALE

All sales will be for cash, and the real estate will not be sold for less than two-thirds of its appraised value.

J. L. BAYARD, Jr., Receiver.

SPECIAL NOTICES.

TINNERS AND CORNICE MAKERS

can learn to cut patterns for anything made of sheet metal by taking our course by mail. Write for free sample plate, prices and terms. Home Industrial School, Milwaukee, Wis. 4t-11

WANTED

Salesmen for a quick-selling line to the hardware and stove trade. Good commissions. "E. C. F.," care THE AMERICAN ARTISAN, Chicago. 2t-11

WANTED

Position as traveling stove salesman for 1906. Michigan territory preferred. Can furnish best of references and reasons for changing. Address "Michigan Territory," care of AMERICAN ARTISAN. 3t.-11

WANTED

Two salesmen to represent a representative boiler and furnace manufacturer, on a commission basis. One for New England states, the other for New York and tributary territory. A good opening for aggressive salesmen. Address A. N. care AMERICAN ARTISAN, 69 Dearborn St., Chicago. u.f.n.

WANTED

Position as road salesman, with furnace manufacturer, or general hardware; am well acquainted throughout the West, North and Southwest, and in either of the above lines; am confident that I can give satisfaction; references furnished. Address W. J., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3t-11

WANTED

Tinners and cornice makers for inside and outside work. Steady employment guaranteed to good mechanics. Scale of wages, 42½ cents per hour. Non-union preferred. Address

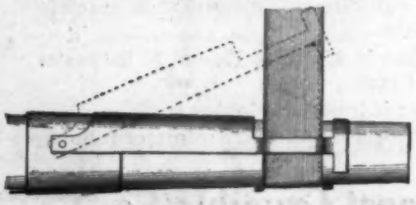
THE ZAHNER MFG. CO.,
2t 12 Kansas City, Mo.

THE ADVANTAGE OF FALL PAINTING

A short practical talk on good paint and good painting for steel work, metal and wood. Write for a copy of the folder B-18.

Address PAINT DEPARTMENT,
JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

THIS PATENT FOR SALE



Outright or on Royalty. U. S. patent No. 772,835. Safety Neck Yoke Attachment. A great boon to liverymen or teamsters. Cheap to manufacture and a great seller. This is worth investigating. Write me for descriptive circulars. Address,

WM. G. SCHULZ, ELMORE, MINN.
4t.11

THE KRAMER BROS. FOUNDRY CO., - Dayton, Ohio.

The KARRYALL STOVE CARRIER

Made of heavy Harness Leather.

Will carry any style Stove or Range made.

Price, Each $3.00

Sold by all Jobbers.

The Gem Adjustable Stove Carrier

Adjusts from 12 to 24 inches.

Castings Malleable Iron.

Price, Each $3.50

Sold by all Jobbers.

The Dayton Stove Carrier

Price, Each $2.25.

Sold by all jobbers.

LARGEST MANUFACTURERS OF STOVE CARRIERS IN THE UNITED STATES.

Outside Bead

The Kind You're Looking For

The famous One-Piece Miter, made of one piece of metal, galvanized or tinned after being formed. Has more space at the bend than can be gotten in a pieced miter. There is therefore no overflowing of water. Fits all standard gutters, single or double bead, slip or lap joint, inside or outside turn.

Write for information.

It is imitated. Get the original.

J. E. Whitacre Mfg. Co.
ROCKFORD, ILL.

Inside Bead

New Invention

in pocket knives. Non-rusting steel handle. Extra strong, three-inch blade.

PATENTED

Cheapest and best knife for workmen and farmers.

$1.40 per doz.—Net cash—f. o. b.

H. O. KEFERSTEIN, Barberton, O.

THE MAN THAT MADE THE SHINE THAT MADE THE MAN.

Black Silk Stove Polish has been the standard in the stove polish world for twenty years. All other polishes are compared with it. It is a common expression among polish salesmen, "I can sell you a polish as good as Black Silk for less money." The more different kinds of polish you use the better you will like Black Silk. Black Silk Stove Polish is the polish that has been made at Sterling, Ill., for twenty-one years by the

BLACK SILK STOVE POLISH WORKS.

If You Want Quality

IN plumbago get a sample of our No. 702 Pure Ceylon Plumbago, test it—we don't care how severe the test is—it will do all we claim, and more.

SUCCESSFUL foundrymen everywhere use our No. 702. Are you successful?

May we send you a sample?

THE S. OBERMAYER CO.
CINCINNATI
CHICAGO PITTSBURG
"The House of Quality and Service."

Champion Stove Clay

The only Stove Lining made of crucible materials.

Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes.

Order it from your jobber.

The best and most refractory lining made.

Bridgeport Crucible Co. Bridgeport, Conn.

ELEVATORS

Improved Quick and Easy Rising Steam, Electric and Hand Power

Send for circulars

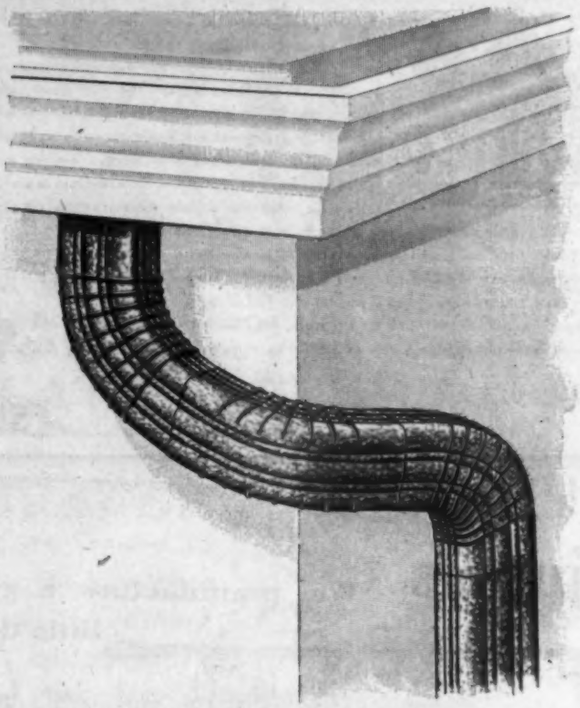
KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IA.
KIMBALL ELEVATOR CO., 129 Viaduct St., CLEVELAND, O.

WHO WOULD STOOP SO LOW

as to use an ordinary Dust Pan, when they can get a "20th Century Dust Pan" for 25c, which requires no stooping, takes up the dust cleaner, and being made of the best Polished Steel, will last longer than ten ordinary Dust Pans. The people want it, and it pays to supply them with what they want.

SCHOFIELD & CO., MFRS.
FREEPORT, ILL.

Combination of Styles A. & B.



A Perfect and Artistic Job

ANNOUNCEMENT

The attention of the trade is respectfully drawn to the fact that—

Our New Factory and Warehouse Building has been completed

We have installed new and rapid machinery with

All Modern Improvements.

We have added a large force of skilled artisans, artists and various other employees, raising our producing capacity to three times what it had been.

All Orders Are Now Shipped on the Day Specifications Are Received.

Our prices are the lowest, the goods the best and

Offered in 1,225 Varieties.

They are for sale at all first-class jobbers and are guaranteed. Be sure, though, that they bear our signature,

F. Dieckmann

CATALOG IN PRESS SAMPLES FOR THE ASKING

Ferdinand Dieckmann

Station B. **CINCINNATI, OHIO**

YOU can't afford to waste your brain energy with annoying routine—lost correspondence—confused records and accounts. That's mere carpenter work. Make your system take care of it. Use your own gray matter for the real creative—the business building—the architect work. Put the letter-hunting—the record-keeping—the business routine—the business detail on Multi-Cabinet Systems.

Multi-Cabinet Systems are not so many pounds of senseless oak and card stock. Each individual cabinet represents so much *brain*—so much—*business experience*—so many labor saving schemes and economies—*moulded* into cabinet form. They are mechanical business assistants; automatic private secretaries that take care of all the business detail—handle the correspondence—keep the records—and relieve you of the petty matters that interfere with brain work.

But our book describes these systems better than we can—tells of 47 simple, economical, time and labor saving methods of handling detail, systems, for every department of your business—advertising—selling—credits—and factory work. And if you do not find in these 47 systems one that meets your own needs exactly—we will get up a special one for you. But first let us send you the book describing this complete line of "grow as you grow" Multi-Cabinet Business Systems.

Representatives in 90 Cities.

Factories: Muskegon, Mich.

151-153 Wabash Av. Chicago.

SHAW-WALKER

Just a Few of Our

Stove Adjuncts

We manufacture a great variety of little things for stoves.

WRITE FOR CATALOGS

The Fanner Mfg. Co.

Cleveland, Ohio

STOVE REPAIRS

MANUFACTURERS' STOVE REPAIR CO.

517-539 Diversey Boul., CHICAGO

PROMPT SHIPMENTS
GIVE US A TRIAL

SAWYER'S AXE and HAMMER WEDGES ARE THE BEST.

Ask your Dealer or Write us.

Smith & Hemenway Co. 296 Broadway, N.Y

North Western Stove Repair Co.

No. 225-235 W. 12th St., CHICAGO

Largest and Best Stock in the World.

Repairs for the Oldest and Newest Stoves, Ranges and Furnaces.

WRITE FOR SUPPLEMENT TO No. 20 CATALOGUE

PATTERNS

For Stoves and Heaters
First-class in wood and Iron.

Vedder Pattern Works, Troy, N.Y.
Established 1835

STANDS 1800 DEGREES.

SILVER LEAF STOVE POLISH

Lasts Forever, Aluminum Paint

SILVER LEAF STOVE POLISH CO.
Indianapolis, Ind.

STOVE REPAIRS

Range Repairs
Furnace Repairs

J. L. Morris Stove Repair Co.

29-31 So. Desplaines St.,
Tel. Monroe 500. CHICAGO, ILL.

Trade HADDON Mark
On All Our Patterns.

The LEIBRANDT & McDOWELL STOVE CO.'S
STOVES and REPAIRS
SHIPPED PROMPTLY.
S. V. REEVES, 50 N. 2nd St., Philadelphia.

WELLER PATTERN Co

DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

QUINCY, ILL.

The GEO. W. COPE Stove Pattern Works

Cor. Brush & Woodbridge Streets

DETROIT, MICHIGAN.

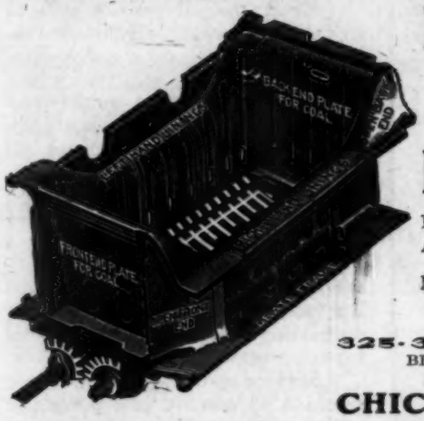
QUINCY PATTERN Co
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

Don't say a word this week about the Black Kid. We have more orders on hand than we can fill.

FOR SALE BY ALL JOBBERS. 65c PER CAN.

NICKEL PLATE STOVE POLISH CO., Mfrs.

BLACK KID STOVE POLISH.



M. BRUCKER

Manufacturer and Jobber of

Stove and Range Repairs

Repairs for all Stoves and Ranges. Adjustable Stove Repairs a Specialty.

MICA, URNS, KNOBS, RODS AND STOVE BOLTS

325-331 North Lincoln Street
BRANCH: 229 North Wells Street
PHONE, 559 North.
CHICAGO, - ILLINOIS

The drummer sometimes earns his dues:
'Tis said the "Cat" will never lose;
But Advertisements *always* pay:
They're somehow *always* in the way.

Williams Stove Lining Company

TAUNTON, MASS.

MANUFACTURERS OF

STOVE LININGS

INCANDESCENT GAS FUEL

AND

EAGLE STOVE CLAY

Largest and Most Modern Plant. Unequaled Facilities. TRY US.

THE ONLY MOLDING SAND

that may be used as mined, without admixture or previous preparation, adapted to the finest castings. Produces best work at low cost.

Highest Award at World's Fair, St. Louis. Catalogue and information on request.

The Newport Sand Bank Co., Newport, Ky.
Incorporated

Chicago Office, 123 Franklin St., KNAPP BROS., Representatives

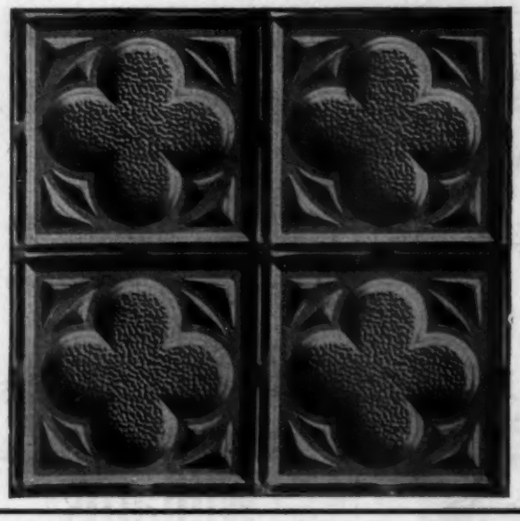
See the Corrugation!

Note the method of corrugating and looping to prevent warping and to strengthen the plate. The handle is rigidly clamped to the stem. The stem is sharply pointed—easily driven through pipe and notched to engage edge of plate; held absolutely in place by the spring, will not turn. Plate stamped from nickled steel. The

Uncle Sam Damper

is the oldest and most reliable sheet steel damper made. It is light, strong, durable. Write for circulars.

SAYRE STAMPING COMPANY, SAYRE, PA.



Gothic Design—One of the great variety of our

Art Metal Ceilings

We manufacture and always have on hand a large stock of

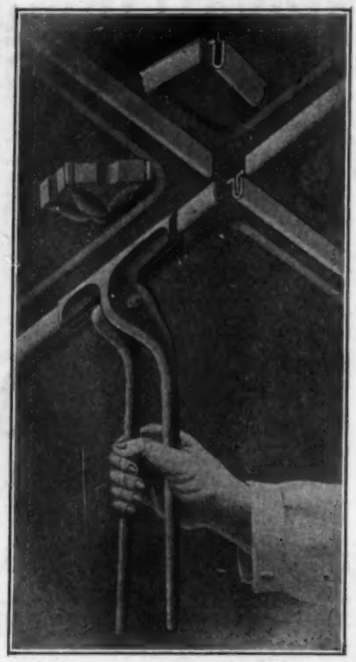
All Kinds of Sheet Metal Goods

for building purposes, in artistic designs and of first-class material. We furnish

ESTIMATES AND PLANS FREE OF CHARGE

Write for catalogs and price list.

Kanneberg Roofing & Ceiling Co.
CANTON, OHIO, U. S. A.



Lock-Joint Metal Ceilings

are easily erected by any mechanic, at a saving of nearly 50% in labor and furring. The edges are formed on the plates and we furnish (without extra charge) the special tongs for tightening the joints. Only 4 nails to the plate. "Absolutely Dust-Proof."

Write for Catalogue D.

S. Keighley Metal Ceiling & Mfg. Co.
Pittsburg, Pa.
WASHINGTON 1335 F St., N.W. | BALTIMORE 510 W. Pratt St.

Roofing versus Readiness

Read the advertisements of any trade paper, listen to the tale of any drummer, peruse the catalog of almost any institution and you will learn about **quality** and **prices.** You will hear that Jack Nimblelegs stole a march on all competitors and is offering a genuine charcoal iron 10 per cent. off other quotations. You will learn that his competitor has discovered a new process whereby tin plate can be made cheaper and better. But you will strike no argument requesting patronage because of superior **service.**

Service counts. It counts just as much as **quality** and **price** and perhaps more. The average customer values quick work, quick shipments. Other things being equal he will invariably give his order to the man who is in a position to do a job promptly.

Our house has long been known as the house of **quality** and **economy.**

It has always been the house of good **service.** We combine all **three** features.

Our immense stock of Conductor Pipe, Eaves Trough, Gutters, Roofing, Siding, Corrugated Iron, Tin and Terne Plates, etc., is varied and thorough. You can find anything you want and what's more we will get it out for you the same day the order is received.

Garry Iron & Steel Company
CLEVELAND, OHIO

BERGER'S "CLASSIK" Steel Ceilings

Awarded the Only Gold Medal at St. Louis.

Eave Trough, Conductor Pipe; Cornices, Finials, Skylights. Steel Office Devices a Specialty.

When You Want the Lowest Prices and Quick Shipments, Write Us.

The Berger Mfg. Company

Canton, Ohio

New York, Boston, Philadelphia, St. Louis

Art. 9-30-5

Black and Galvanized Sheets; Corrugated Iron; Roofing; Siding; Tin Plate; Solder, etc., etc., etc.

Berger's Genuine Guaranteed Rehammered Charcoal Iron

Excelled Only by Copper. Strict Guarantee Furnished

Every Business Man Wants to Make All the Money He Can

Some try to attain their aim by deceiving or robbing their victims, exploiting the weak, by extorting every cent from anybody and everybody they can.

THE MODERN BUSINESS MAN with a knowledge of the world and human life **ACHIEVES SUCCESS BY PLEASING THE MEN WITH WHOM HE DEALS.** He keeps everything that they want or can develop a taste for. He sells his goods at very low profits. Satisfying his buyers, he eventually has a great number of them, and

A Little on Many Sales is Better Than Much From a Few Customers.

Dealers and jobbers in metal products will find it to their advantage to *SEE OUR CATALOGS.*

The Bostwick Steel Lath Company, Niles, Ohio

Write DEPARTMENT M. Mention THE AMERICAN ARTISAN

THE NATIONAL SHEET METAL ROOFING CO.

METAL SHINGLES & TILES FROM TIN, GALVANIZED TIN AND COPPER. REQUIRE NO PAINTING OR AFTER CARE

RUST, STORM & FIRE PROOF

LARGEST VARIETY OF STYLES

339-345 GRAND ST JERSEY CITY, N. J.

HOOKS

FOR CONDUCTOR PIPE—ALL SIZES

For Brick or Wood

Made of the best malleable iron and first-class in every way. Send for catalogue-

BERGER BROS CO., Philadelphia

OFFICE AND STORE: 237 Arch St. WAREROOMS: 100-02-04 Bread St. FACTORY: 3114-16-18-20 N. 17th St.

Persistence in Advertising

In the expansion of business now bringing profit to so many manufacturers, advertisers who have made themselves regularly prominent in the past five years have been notable in reaping the rewards of persistent publicity.

Are you interested in good Metal Ceilings

"CANTON"
METAL CEILINGS

are the best yet. Far ahead of anything on the market in construction. **Get our new book "H," devoted entirely to Art Metal.** Just Out. It's Free.

THE CANTON STEEL ROOFING CO.
CANTON, OHIO.
New York Office, 157 W. 23rd St.

The "STAR" Ventilator

Trade Mark M&E

Philadelphia, Chicago, New York, Brooklyn, Baltimore, Kansas City.

Storm Proof, Effective. For ventilation of all kinds of buildings, both public and private.

Merchant's Metal "Spanish" Tiles and "Gothic" Shingles

Are the most Ornamental Roofing made in metal. We are makers of **High Grade Roofing Tin**

Illustrated Booklets of TILES and VENTILATORS will be mailed free upon application

MERCHANT & EVANS CO.

Successors to MERCHANT & CO., Inc., Sole Manufacturers.

SHEET BRASS, All Tempers. BRASS and BRONZE DRILL RODS.
BRASS and COPPER WIRE. GERMAN SILVER SHEET and ROD.
BRAZED and SEAMLESS TUBING.

Eagle Brand Copper Rivets and Burrs
Brass Escutcheon Pins

Brass Butts, Desk Narrow, Broad Middle, Ball Tipped and Water Closet

Brass and Iron Jack Chain, Brass Safety Chain, Etc.
Catalogues on Application.

NEW YORK THE PLUME & ATWOOD MFG. CO. CHICAGO

CORNICE COPPER

Soft and Cold Rolled—all sizes. Boiler Sheet Copper and Bottoms.
All kinds of Tubing, Rod, Sheet and Wire in Copper and Brass

Send for Stock List of what we carry in our store.

CHICAGO BRASS COMPANY
Successor to Benedict & Burnham Brass and Copper Co.
211-213 LAKE STREET, CHICAGO

HOTCHKISS CLIPPERS

Standard Quality and Workmanship Guaranteed. Prompt Shipment. Prices Right.

Simple in Design. Elegant in Finish.

No. 75

Send for Descriptive Catalogue and Prices.

EDWARD S. HOTCHKISS,
IRANISTAN AVE., BRIDGEPORT, CONN.

Reduced Railroad Rates for Merchants

The Chicago Commercial Association has secured reduced rates to Chicago for its members, merchants and manufacturers who are patrons of its members, on the dates which follow:

WESTERN PASSENGER ASSOCIATION TERRITORY

Rates of one and one-fifth fare on the certificate plan have been granted from points in Iowa, Wisconsin, Nebraska, Colorado, New Mexico, on the Atchison, Topeka and Santa Fe proper; New Mexico and Arizona on the Santa Fe Pacific; Wyoming (from Cheyenne only); also in Minnesota and North and South Dakota, except on the Soo System, and members on this line can secure the reduced rates from the nearest points on other lines; Illinois, Missouri and Kansas in Western Passenger Association Territory, and Northern Peninsula of Michigan.

Fifth Meeting—Purchasing dates, Oct. 28 to Nov. 4. Return dates, Nov. 1 to 14.

SOUTHWESTERN POINTS

Rates of one and one-fifth fare on certificate plan have been granted by the Atchison, Topeka and Santa Fe System, east of and including Arizona and New Mexico; Chicago, Rock Island and Pacific; Chicago, Rock Island and Gulf; Kansas City, Clinton and Springfield; Missouri Pacific-Iron Mountain System; St. Louis and San Francisco; Kansas City Southern; El Paso and Northeastern System; Gulf, Colorado and Santa Fe; Missouri, Kansas and Texas System; International and Great Northern, for the same dates as from Western Passenger Association territory.

CENTRAL PASSENGER ASSOCIATION TERRITORY

This is the territory east of Chicago as far as Buffalo and Pittsburg and north of the Ohio river.

Fourth Meeting—Purchasing dates, Oct. 28 to Nov. 3. Return dates, Nov. 1 to 11.

The rate from this territory will be a fare and a third for the round trip.

HOW TO OBTAIN THE RATE

Purchasers of tickets must in all cases take certificates (not a receipt) from the ticket seller at the point of starting. Upon arriving in Chicago communicate at once with THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, or with the merchant with whom you may be doing business or may desire to do business.

The certificate receipt, which the purchaser must ask for and obtain in all cases from the ticket agent when he buys his going ticket, must also be presented to the association secretary, in connection with the membership card which should be obtained from some member of the association in Chicago, who, if everything is correct, will endorse such certificate, and it will then be turned over to the joint agent of the railway companies for his endorsement. The certificate so endorsed will then permit the holder, upon presentation to the ticket agent at Chicago, of the railway lines over which the member travels, to obtain his return ticket for one-third or one-fifth the one-way fare.

To avoid delay and confusion in the rush to make trains, deposit your ticket with the secretary upon your arrival in Chicago.

Only retail merchants, manufacturers and bankers, in good standing, are entitled to the rate privilege.

SPECIAL RATES

ILLINOIS CENTRAL AND THE SOUTH

The Illinois Central will make a rate of about a fare and a third for the round trip between June 1 and Sept. 30, bearing final return limit to Oct. 31, from all points in Tennessee, Mississippi and Louisiana.

FROM THE PACIFIC COAST

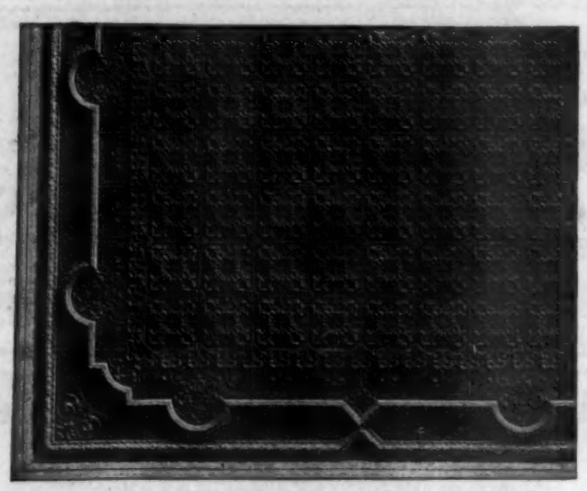
The Southern Pacific will make a rate from San Francisco, Los Angeles, Colton and Redding and intermediate points of $72.50 for the round trip to Chicago on July 4, 5, 6 and 24, 25 and 26, ensuing.

THEY LOOK IT WELL DESIGNED WELL FINISHED

WHEELING CEILINGS MADE OF STEEL

MADE ONLY BY **WHEELING CORRUGATING CO., Wheeling, W. Va.**

The introduction of Steel Ceilings and Side Walls as a safeguard against fire is a duty which owners of Public Buildings owe both to themselves and to the community at large.



CEILING DESIGN No. 1210

FIRE PROOF.
EASILY APPLIED.
PRACTICALLY INDESTRUCTIBLE.
THE MOST ARTISTIC INTERIOR FINISH.
DESIGNED FOR ROOMS OF ALL KINDS.
MODERATE IN COST.

If furnished with a diagram, showing a plan with dimensions marked thereon, we will be pleased to prepare, free of cost, a drawing showing a suitable ceiling applied to your room, and will quote you attractive prices.

WE MANUFACTURE THE LARGEST AND MOST ARTISTIC VARIETY OF DESIGNS IN THE WORLD.

Large Stocks of all our Products are Carried at the Factory and in all the Warehouses.

Branch Offices and Warehouses

New York City, - - 47-51 Cliff Street
Chicago, - - 45 and 47 Lake Street
St. Louis, 112, 114, 116 South Eighth Street
Philadelphia, 402, 404, 406 Race Street
Boston, Mass., - 132 and 134 Pearl Street
CHATTANOOGA, TENNESSEE

INDUSTRIES ARE OFFERED LOCATIONS

WITH

Satisfactory Inducements,
Favorable Freight Rates,
Good Labor Conditions,
Healthful Communities,

ON THE LINES OF

THE ILLINOIS CENTRAL R. R.
AND THE
YAZOO & MISSISSIPPI VALLEY R. R.

For full information and descriptive pamphlet address

J. C. CLAIR, Industrial Commissioner,
1 Park Row, CHICAGO.

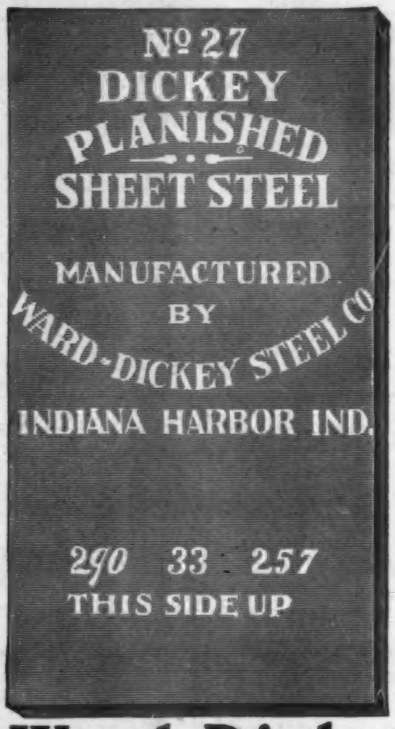
It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

ADDRESS

DANIEL STERN
69 Dearborn St., - CHICAGO



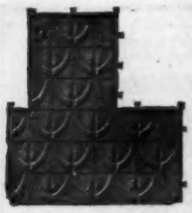
Hammer Planished

Open Hearth steel sheets for Stoves, Ranges, Stove Pipe, Elbows, etc. Soft — Tough — Never Breaks — Takes long and high heats and holds its color. Send for price list. Gauges No. 18 to 28.

Manufactured by

Ward-Dickey Steel Co.
INDIANA HARBOR, IND.

HOMESEEKERS EXCURSIONS Via NORFOLK & WESTERN RAILWAY
On FIRST and THIRD TUESDAYS in each month to **VIRGINIA**
For all information as to Rates and Tickets and for LAND PAMPHLET Sand descriptive matter, address ALLEN HULL, D. P. Agt., Columbus, Ohio



THE largest producers in the west solicit the orders of the trade for Art Metal Ceilings, Architectural Ornaments, Roofing, Corrugated Iron, Galvanized Iron, Corrugated Conductor Pipe, Finials, Weather Vanes, Cresting, Etc., Sheet Copper. Galvanized Steel Tanks for All Purposes.

FRIEDLEY & VOSHARDT

194-202 Mather Street : : : CHICAGO, ILL.

STEEL CEILINGS!

ROOFINGS
SIDINGS
EAVE-TROUGH-CONDUCTOR

CORNICES!

QUICK SHIPMENTS!!!

DROP A POSTAL FOR New Cat!!

SKYLIGHTS!

La Crosse Steel Roofing & Corg. Co., La Crosse, Wis.

ROOFING SLATE

SLATE BLACKBOARDS

E. J. JOHNSON & CO.

38 PARK ROW, NEW YORK

Quarries: PENNSYLVANIA AND VERMONT

Prices quoted delivered anywhere. Booklet and complete Price List on application. Wire inquiries given quick attention

O'HALLORAN & JACOBS,

ROOFING SLATE

SLATERS' SUPPLIES.

829-830 Park Building, PITTSBURG, PA.

You do not have to paint

Arrow Brand Asphalt Ready Roofing

When laid according to directions it will need no care for many years.

Asphalt Ready Roofing Co., 136 Water St., N. Y.

PORTABLE ASPHALT ROOFING

THE WORLD'S BEST

Monarch, Felspar, Slag, Asbestos, Cork, Gravel, 1, 2, 3-ply Paints, Cement.

Write for Samples, Prices and Booklet.

Our line brings trade—
Gives universal satisfaction.

STOWELL MFG. CO., JERSEY CITY, N. J.

Put Up a Good "Front"

If You Want to Succeed

and this applies to the Building as well as to the Owner.

Our metal store fronts have the **appearance of success that begets success.**

TO DEALERS: Write us about your own front or the one **you** can sell to the other fellow. Catalogues and prices on request.

We manufacture everything in sheet metal.

ST. PAUL ROOFING CORNICE & ORNAMENT CO., St. Paul, Minn.

MANUFACTURERS

Write us for information about Good Locations in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Southern Illinois, Southern Indiana, Tennessee and Virginia, in the territory of the

SOUTHERN RAILWAY AND MOBILE & OHIO RAILROAD

For your industry. We have advantageous locations for almost every sort of

MANUFACTURING PLANT

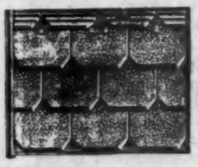
Where conditions of Production and Distribution are favorable. We have the Iron, Steel, Timber, Fuel, Transportation Facilities, Markets. No section surpasses ours.

M. V. RICHARDS,
Land and Industrial Agent
Washington, D. C.

CHAS. S. CHASE, Agent, 722 Chemical Building, St. Louis, Mo.

M. A. HAYS, Agent, 225 Dearborn Street, Chicago, Ill.

BURTON'S Eastlake Shingles



Have been on buildings for 17 years, in good condition yet. Better than any metal, slate or wood roofing sold. Write for catalog.

The W. J. Burton Co.

DETROIT, MICH.

Have You Subscribed?

E. H. TITCHENER & CO.

Headquarters for
STAPLES AND THINGS.
Binghamton, N.Y.
and 42 N. Peoria St., CHICAGO.

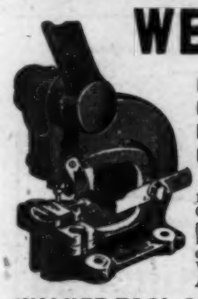
Combined Punch and Squaring Shear (Hand Power)

This Combined Punch and Squaring Shear is designed especially for Range Manufacturers, for squaring, trimming or slitting, or for cutting rectangular or triangular holes of any size in the center of large sheets. We build a complete line of Shears, Punches and Bending Rolls, all sizes, for either hand or belt drive.

BERTSCH & CO., Cambridge City, Ind.

Write for Prices on
ROOFING SLATE
THE AULD & CONGER CO.
Manufacturers and Dealers
CLEVELAND, O.

WE BUILD



Power Punches, Lever Punches, Lever Shears and Bolt Cutters.

We equip shops and factories with Power, Gasoline or Steam Engines. We make all kinds of dies and special tools for the trade. Write for free booklet. Address,

WALKER TOOL CO., 132 Steel St. Lansing, Mich.

PATENT LIGHTING PORTABLE PUNCH NO. 3: a high grade tool adapted to all forms of curved or flange work; pays for itself every week in the year. Cap 3-16 iron. For catalog and price address

AMERICAN LOCK NUT COMPANY, Oregon, Illinois

The Harrington & King Perforating Co.

Lightning Conductor Ground Rod

(Patented April 30, 1895.)

With Automatic Water Supply

The ground rod is the most important part of the rod. Sometimes the ground is perfectly dry, and the deeper the harder the ground is in some localities. By our invention you can be sure of two feet or more of water all the time in the rod and moist earth around the point in the ground. It is made of ⅝-inch pure copper tube, and sells for 25c per foot; no more or no less. We want to furnish it to a responsible dealer in every town.

Write for Catalogue.

The Security Lightning Rod Co.
Burlington, Wis.

H. WEISS & CO.
20 CLIFF ST., NEW YORK

Skylight Gearing and Chain Lifts

Tinsmiths' & Plumbers' Tools.
Cornice Makers' Tools.
Coppersmiths' Tools.
Pipe Threading Machines.

Second-Hand Goods Bought, Sold and Exchanged.

Slitting Machine for No. 12 Iron

THE "Big Four Route"

passes through an interesting Country every mile of the way

CHICAGO TO
INDIANAPOLIS
CINCINNATI
LOUISVILLE
and all points
SOUTH and SOUTHEAST

Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. R'ys. For reservations, etc., call on or address

J. C. TUCKER, G. N. A.
258 Clark St., Chicago.

CORTRIGHT METAL SHINGLES

Tinners: The busy roofing season is here; don't confine yourselves to plain tin roof work. We offer you a larger field. Write to-day.

Cortright Metal Roofing Co.
Philadelphia : Chicago

Inclinable Power Press

TOOLS FOR SHEET METALS

INCLUDING

Tinners' and Roofers' Tools,
Shears, Punches, Presses and
Dies, Can-Making Machinery

MADE BY

Niagara Machine & Tool Works,

BUFFALO, N. Y.

LET US BE YOUR FACTORY!

ALL KINDS OF MANUFACTURING TO ORDER.

Special Devices, Novelties or Appliances manufactured to order by contract. Send models or perfect drawings for estimates. We also make Dies and Stampings. Write for our Booklet.

THE GLOBE MACHINE & STAMPING CO.

971 HAMILTON ST., CLEVELAND.

MANUFACTURERS

Contemplating establishing plants in the West should take advantage of a location on

THE NORTH-WESTERN LINE
C.&N.W.RY

Chicago & North-Western Ry.

WHICH REACHES THE FAMOUS

Water Powers, Coal Fields, Iron Ore Ranges, Hard & Soft Lumber Districts

of the West and Northwest, and affords the best means of transportation to the markets of the world. For further particulars apply to

MARVIN HUGHITT, Jr. Freight Traffic Mgr.
E. D. BRIGHAM, Gen. Freight Agt.

CHICAGO.

We are prepared

to bid on specialties in metal work or manufacture them on royalty.

KINSEY MFG. CO., DAYTON, OHIO

ASK YOUR DEALER FOR THE

Sem

Soldering Furnace

AND YOU WILL MAKE NO MISTAKE

Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequalled—Unrivaled—Safe—Sure—Durable.

GALVANIZED IRON, BRASS OR COPPER RESERVOIR.

Equipped with Cylindrical Slotted Burner.

MADE ONLY BY

BURGESS SOLDERING FURNACE CO.

COLUMBUS, OHIO, U. S. A.

TINNERS

You can save the price of a No. 10 Furnace in one year's time in the saving of gasoline over other styles; also many dollars' worth of time.

NOISELESS, NO ODOR, NO SMOKE

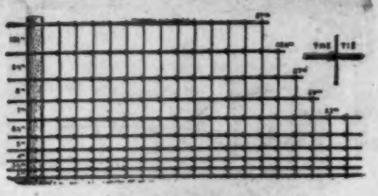
More Heat with Less Fuel.
Greatest Range of Heating, 3 to 12 lbs.
Copper Indoors or on a Roof.

Order direct of your jobber, or we will ship direct for $6 50.

GEO. W. DIENER MFG. CO., 217 E. Lake St., Chicago

JOS. P. BELL, Baraboo, Wis., Writes: "Please take my ad. out of your paper. If you don't I will have to hire a man to answer the letters I am receiving."

The Fence That Suits



Your Customer

is the one for you to handle

Woven Field Fencing

Both Single and Double Strand.

JUMBO POULTRY turns everything.
Lighter Poultry for less money of Various Weights.

Lawn and Cemetery Fence, Barb Wire, etc.

SEND FOR CATALOGUE.

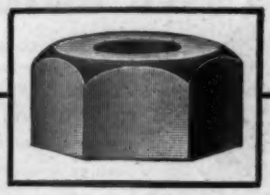
THE DENNING WIRE & FENCE CO.

CEDAR RAPIDS, IOWA

IMPROVED OIL CAN FAUCET

J. M. LITCHFIELD

227 WATER ST., NEW YORK



Cold Punched NUTS

HIGH GRADE
GOOD LOOKING
ACCURATE

Semi-Finished NUTS

GARLAND NUT & RIVET CO.

PITTSBURGH, PA.

Quality Tells

That's why Disston's Saws are known throughout the world. It has taken years of patient experimenting and great expenditure of money to bring Disston's Saws to the point of perfection which they have attained. Lumbermen can attest to the superiority of our saws. Hardware men know they are good because of the many sales made, and customers know they are good because they have withstood the wear and tear of time and toil.

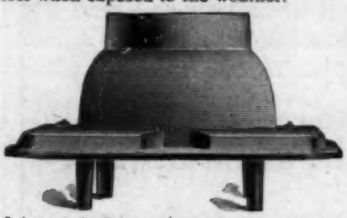
HENRY DISSTON & SONS

Keystone Saw, File and Tool Works

PHILADELPHIA, PA.

The Best Chimney Cap

This cap as illustrated below is made of cast iron and is designed to replace the old style galvanized sheet iron hood. The Best will last a lifetime, for cast iron will last longer than any other form of iron or steel when exposed to the weather.



It is made in three sizes and the legs are adjustable. The legs project inside the chimney to prevent the cap from blowing off. It is not necessary to use mortar or cement to fasten this cap to the chimney as the legs will keep it in place.

This is a Good Thing. Has Merit. Write for Prices

Put up in half doz. and one-third doz. crates. If your jobber does not handle the Best write to us.

STERLING FOUNDRY COMPANY, STERLING, ILL.

Why Do We Keep Talking About the No. 1 Fire Pot

$6.00 Net.

when we have so many other styles known to have special merit? **We, like you,** are always anxious to have our friends **know and appreciate a good article,** and we know that if you are using a No. 1 you are pleased and are telling your friends about it. **If you are not using a No. 1 you are the loser for you are missing the extra good service** you would obtain by its use. Jobbers sell at factory price under our guarantee "Your money back if you are not pleased."

CLAYTON & LAMBERT MFG. CO.,
DETROIT, MICH., U. S. A.

CUT-OFF

DURABLE, SIMPLE, CHEAP.

The Best and Most Practical.
Write your jobber for prices.

Manufactured by

CONDUCTOR FITTING CO.,
Marietta, O.

Gasoline Soldering Iron and Blow Torch

Furnished with two coppers drop forged from bar, one for regular work and one for heavy roofing work. Nothing complicated. No pump to get out of order. No Platinum coils to burn out. Never too hot and never too cold. No wind will blow it out. Can be changed to blow torch instantly. Can be carried in any tool kit, or lineman's belt. Will last for years. Used by tinners, plumbers, painters and electricians. Guaranteed to give satisfaction. If your jobber does not handle them write us for illustrated booklet and price.

EMMELMANN BROS. MFG. CO., Indianapolis, Ind., U. S. A.

The "Manest" Laundry Dryer

is for family use. It boils the clothes, dries the clothes, and heats the irons with one fire.

Good Profits to Agents.

THE MANNEN & ESTERLY CO., - Cleveland, Ohio

Sole Manufacturers.

SMITH'S BOSS

R. F. D. Mail Box beats them all in price and quality; $5.25 per dozen.

Made of No. 20 gauge galvanized sheet steel; none more substantial. Sufficiently large for any family.

Signal that holds the cover secure against any storm. We also manufacture several other style mail boxes. Write us now for catalogue.

SMITH BROS. MFG. CO.

246 E. Kinzie St., CHICAGO, Ill. 261 S. Meridian St., INDIANAPOLIS, IND.

Locations for Industries

Erie Railroad System Chicago to New York

The Erie Railroad System's Industrial Department has all the territory traversed by the railroad districted in relation to resources, markets and advantages for manufacturing, and can advise with manufacturers of specific products as to suitable locations, furnishing them with current information of a comprehensive nature, dealing with the project in its full relation to manufacture and commerce.

The Erie is one of the greatest of trunk lines. Its own rails connect the two largest cities of America.

Every section of the System has its particular merits. It has great general and coal, oil and natural gas resources,

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connection about every point on the system between Chicago and New York.

Manufacturers' inquiries as to locations are treated in strict confidence and absolutely reliable information, so as to promote permanent traffic, is furnished. Address

LUIS JACKSON
Industrial Commissioner
Erie Railroad Company
21 Cortlandt St., New York.

The House Warming Manual

Is beyond all doubt the best book published on practical house heating. It contains the plans and essays on heating a house submitted in THE AMERICAN ARTISAN House Warming Competition for $300.00 prizes, and is in fact

An Encyclopedia of the Most Modern and Improved Practical Methods of Heating a House by Steam, Hot Water and Warm Air.

A Leading Western Newspaper says

"The volume is a well-bound and artistically printed and illustrated volume of nearly 300 pages, and contains some masterly essays on steam heating, hot water heating and warm air heating. Nearly every prominent authority in this field is quoted, and an application of principles and improvements suggested covers all technical details in a simplified and practical way. House plans and diagrams accompany the subject matter which deals specifically with radiation, combustion, ventilation, prices, estimates and the best and latest methods for placing, connecting and utilizing the apparatus adopted."

Price, Only $3.50 Per Copy.

For sale by all booksellers or the Publisher

DANIEL STERN, 69 Dearborn St., Chicago.

1905 Ocean Wave Washer

With Covered Gear

You want the exclusive agency?
WRITE US.

VOSS BROS. MFG. CO.
Davenport, Iowa

MAKE MORE MONEY

Rural Routes are going in allaround you. You can get this business with the **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. • The best made, the best liked, the easiest sold and the best advertised.

SIGNAL MAIL BOX CO.
106 Benton St., Joliet, Illinois

Blick No. 3 The Best Box
FOR RURAL FREE DELIVERY
$5.88 Per Dozen

BE JUST WITH CUSTOMERS

Sell them Blick No. 3 boxes. They are big ones, 8x8x18 inches. Made of heavy galvanized steel. Painted green, the new Government color. Same shape and color as city boxes. Have Positive-Locking Flag Signal, Automatic Latch, Water-Tight Quality. Every box sealed, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

BLICK-WILLIAMS CO.
INDIANAPOLIS, IND.

THE SMILE

THAT WONT COME OFF

Is always worn by the THRIFTY HOUSEWIFE who uses a

WHITE LILY WASHING MACHINE

WRITE FOR EXCLUSIVE AGENCY

WHITE LILY WASHER CO.

TOLEDO, OHIO. DAVENPORT, IOWA

"A Trio of Trade Winners"

The "B.B." Roller Gearing Rotary
The Schroeder " " "
The Brammer Rotary

BEST IN THE WORLD
Write us for further particulars.

Benbow-Brammer Mfg. Co.
ST. LOUIS, MO.

Don't wait until some other Hardware Merchant is selling all the O. K. Washing Machines in your vicinity.

Take up their sale now—before some of your competitors—and you'll have the prestige of being first to sell the O. K. Washing Machine. The O. K. Washers are a little better, and a little different from other Washing Machines.

Our little booklet tells all about them. Free on request.

H. F. BRAMMER MFG. CO., Davenport, Iowa

"THE GEM LINE"

GEM NO. 1

Hustle

Gets the mail-box business.

Gem Boxes please 99 per cent of box-buyers and they yield a **mighty nice profit.** They are strongly built, fine-appearing boxes and make it easy for you to get other business.

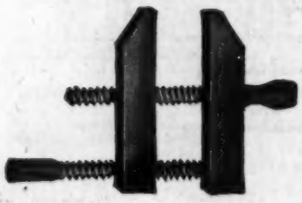
GEM NO. 2

Don't let your customers be swindled by a peddler.

All jobbers handle "The Gem Line"

C. A. PECK H'D'W. CO.
BERLIN, WIS.

The Hand Screw with the Saw-Cut Thread



The Best That Money Can Buy.

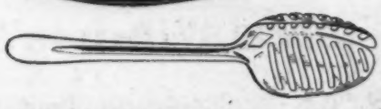
Our Hand Screws are the result of 15 years' experience in making Cabinet Maker Clamps, Etc. We make a complete line of Cabinet Clamps, Cabinet and Manual Training Benches and Factory Trucks.

Write for Catalog.

GRAND RAPIDS HAND SCREW CO.
160 South Ionia Street, GRAND RAPIDS, MICH.

Stay-In Flue Stoppers

Brass finished. Nicely decorated. Cannot be jarred or blown from flue hole. Guaranteed to be soot proof.



Perfection Cake Mixer

Made of No. 16 steel. It's one of the best articles on the market. Almost everybody thinks so.

STUBER & KUCK, Peoria, Ill.
Manufacturers of Pieced Tinware and all styles of Flour Sifters.

Peoria Washing Machines

Best in the Market—Made With Ball Bearings

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.

Send for Catalogue. Secure the Agency.

CLARK, QUIEN & MORSE
PEORIA, ILLINOIS

Please Your Customers

by supplying them with **"Ohio" Plane Irons.** They are extra well made and fully guaranteed.

Our large line of Carpenters' Tools include:

Planes, both Iron and Wood. Chisels, Drawing Knives. Gouges, Auger Bits, Spoke Shaves, Bench and Hand Screws, Etc.

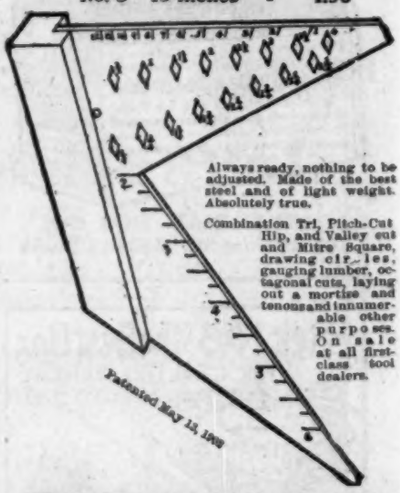
NOTE—We do not sell Catalogue Houses.

Ohio Tool Company
Factories: COLUMBUS, OHIO. AUBURN, N. Y.

New Universal Square

Made in Three Sizes

No. 1	6 inches	-	$0.65
No. 2	10 inches	-	1.00
No. 3	13 inches	-	1.50



Always ready, nothing to be adjusted. Made of the best steel and of light weight. Absolutely true.

Combination Tri, Pitch-Cut Hip, and Valley cut and Mitre Square, drawing circles, gauging lumber, octagonal cuts, laying out a mortise and tenon and innumerable other purposes. On sale at all first-class tool dealers.

THE DUBY & SHINN MFG. CO.
INCORPORATED
Nelson Bldg., 19 Park Place, New York City
(Please mention The American Artisan.)

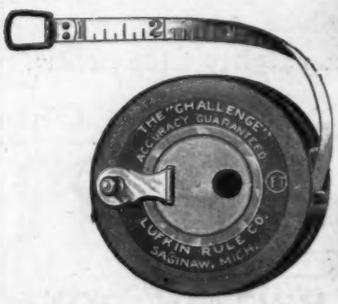
EUREKA SKATE SHARPENERS

Simple, Quickly Adjusted and Accurate

WILL SHARPEN ANY SKATE

Place your orders now. Ask your dealer or jobber for **Eureka** or write for Green Book.

Smith & Hemenway Co.
Mfrs. Cutlery & Hdw. Specialties.
296 Broadway, Dept. 149
NEW YORK



Measuring Tapes

Steel, Metallic, Linen, etc. Our goods are Recognized as the Best. Tinners' Rules, Magic Pattern Rules, etc. Send for Catalogue and Mention The American Artisan.

Lufkin Rule Co.

SAGINAW, MICH.

A Business Man's Reputation

will be good or bad just as he is careful about the small rivet in a furnace, the pin hole in a roofing plate or the bottom of a coal hod. People judge by small things.

The bottom of the

Victor

coal hod is reinforced. It will last forever. It costs a

trifle more because of the extra profits allowed the dealer, but this is more than offset by its durability, its attractiveness. Its use will give the retailer a reputation for honor and pride.

Ask about Victor Water Pails and Wash Tubs.

The Victor Stamping Company

Broadway, LOVELAND, OHIO

"Yankee" Drills

HAVE YOU SEEN THE NEW DRILL—NO. 44 WITH ADJUSTABLE TENSION?

No. 44—AUTOMATIC DRILL.

SOLD BY LEADING JOBBERS

No. 42—AUTOMATIC DRILL.

No. 43—AUTOMATIC DRILLS FOR VERY LIGHT DRILL POINTS.

Send for "Yankee" Tool Book

No. 80—RECIPROCATING DRILL FOR WOOD OR METALS.

NORTH BROS. MFG. CO., Philadelphia, Pa.

POCKET LEVELS

Boxwood and Ivory RULES PLUMBS and LEVELS Gauges

PLANES Hand Screws, etc., etc. BEST Workmanship and Finish.

The Chapin-Stephens Co.

Address Lock Box 13 PINE MEADOW, CONN., U. S. A.

IT TAKES MORE MONEY

to buy an **Iwan Post Hole and Well Auger** than any other auger or digger on the market, and yet it is the cheapest to the user, because it saves him so much time and labor in making his post holes.

There are more Iwan Post Hole and Well Augers sold than all other post augers.

One—two—three full turns of the auger and it is full of earth and lots of it. Makes a hole smoothly and quickly, empties easily and is more durable. Sizes 3, 4, 5, 6, 7, 8, 9, 10, 12 and 14 inch. Easily sold at full list price.

LIST PRICES.

	each	per doz.
3, 4, 5 and 6 inch	$ 2.30	$28.00
7 and 8 inch	2.50	30.00
9 inch	2.65	32.00
10 inch	3.00	36.00
12 inch	8.00	96.00
14 inch	10.00	120.00

Sold by the wholesale hardware and implement trade.

IWAN BROTHERS, Streator, Ill.

Manufacturers of Hardware Specialties

THE ECLIPSE AKRON SPIRIT LEVEL

Sent to all dealers on approval. Write for our new illustrated catalogue and prices.

Manufactured by **THE BAKER-McMILLEN COMPANY, Akron, Ohio**

STANLEY RULE AND LEVEL CO.

IMPROVED CARPENTERS' TOOLS

Sold by All Hardware Dealers NEW BRITAIN, CONN.

A Seasonable Article For this Fall & Winter

The 20th Century White Flame

HEAT & LIGHT IN ONE

Wholesalers Are Placing Their Orders Now To Insure Supply for the Fall and Winter Demand.

GAS BURNERS GIVING HEAT AND LIGHT

At Cost of LIGHT ONLY.

FITS ANY GAS FIXTURE—HEATS AND LIGHTS ANY ROOM.

RETAILS AT **$1.25**—*Good Margin for Jobber and Retailer—Big Seller.*

For fuller particulars, address,

20TH CENTURY MFG. COMPANY, 19 Warren Street, N. Y.

Manufacturers of the Famous Bicycle and Automobile Headlights

"ALASKA" SNOW SHOVELS

High grade steel blade 11x13½ in. Lacquered to prevent rust. Glossy, finish.

Handles strong, select white ash. Smoothly sanded. Neatly labeled.

"TROPIC" furnace shovels. Go into ash pit without striking frame of door **"KLOYNDYKE"** and **"SOLID STEEL"** Sidewalk Cleaners. Blade 6x6½ inches, 10 and 12 gauge steel.

Write for Catalogue and Price List

"NEVER-BREAK" Cooking Utensils always in season.

THE AVERY STAMPING CO.

CLEVELAND, OHIO

Sole Mfrs. "NEVER-BREAK" Wares

Ely's Dandy Hay Knife

Will do the work of an extra man, thereby saving more than the price of it in one day, besides doing it easier than others. **Made on the right plan,** of malleable iron and steel, with oil-tempered Steel Knives. Combination hand and foot power. Ask your jobber for them. If he don't keep them write us.

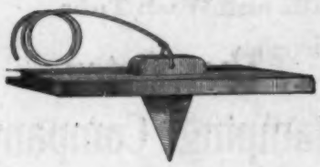
Manufactured by

THEO. J. ELY MFG. CO.,

GIRARD, PA., U. S. A.

Write for Our Circulars

and we will tell you what's doing in the Fence Anchor business.



The only Anchor made for between the posts and for corner posts.

LENAWEE MFG. CO.

ADRIAN, MICH.

C. N. HOOPER, Dubuque, Iowa.

VITREOUS ENAMELING

TECHNOLOGIST

Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

$25 ON 5 TON

Is what you can save

We make all kinds of SCALES.

WRITE FOR PRICES

Also B. B. PUMPS and WIND MILLS

BECKMAN BROS., Des Moines, Ia.

No Dust, No Dirt

Pleases everybody

Quick Seller

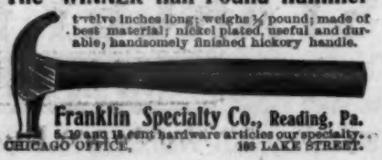
Order at once to insure prompt delivery.

Send for prices.

HILL DRYER CO.

Worcester, Mass., U. S. A.

The WINNER Half Pound Hammer



twelve inches long; weighs ½ pound; made of best material; nickel plated, useful and durable, handsomely finished hickory handle.

Franklin Specialty Co., Reading, Pa.

5, 10 and 15 cent hardware articles our specialty.

CHICAGO OFFICE, 165 LAKE STREET.

JUST A MOMENT!

Hundreds of thousands of these

Registering Savings Banks

have been sold by us through the Hardware and Stationery trades.

They are of generous size, work correctly and are guaranteed.

Millions of dollars have been saved through their use.

There is a good margin of profit to the dealer and much satisfaction in their sale.

Please Note Our Patent Date; April 7, 1891

Infringements are on the market. Correspondence solicited. Prices are right. **That's All.**

PIAGET NOVELTY CO.,
SOLE MANUFACTURERS
264 Broadway, New York

This Label on all Taplin's Pat. Improved **Dover Egg Beaters** stands for **Quality and Durability.**
THE TAPLIN MFG. CO., New Britain, Conn., U.S.A.
166 Chambers St., New York.

The World's Standard "Pullman" Coil Door Springs

Malleable Iron Hooks
No. 209 Japanned Screw Eyes
We are booking orders now for Spring Delivery
Price guaranteed to date of shipment

PULLMAN MFG. CO., Rochester, N. Y.

JUST OUT!

Rulofson's California Toaster

PATENTED

Makes beautiful golden brown toast. Heats rolls and biscuits to a nicety; substitute for a double boiler preventing scorching; an ideal bed warmer and carriage heater—better than a hot water bottle. The popular price (25c) at which it is sold commends it to all class of buyers. Large profits to jobbers and retailers.

Advertised largely in many popular periodicals. WE PAY THE FREIGHT.

Write for special prices and exclusive territory

Retails 25c

A. C. RULOFSON CO.
Sole Manufacturers and Patentees
CROSSLEY BLDG., SAN FRANCISCO, CAL.

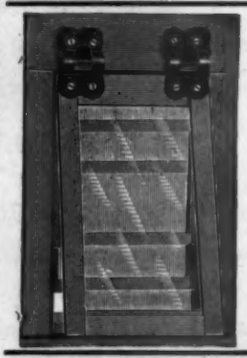
The Taylor & Boggis Foundry Co.

CLEVELAND, OHIO

Manufacturers of

LIGHT GRAY IRON CASTINGS

Builders' Hardware
Dampers and Damper Clips
Oil and Gas Stoves
Furnace Lamps
Molasses Gates
Letter Boxes
Hardware Specialties.



Full length window screens keep out all the flies and protect the windows. Screens attached with

GOSSETT'S Detachable Suspension HINGES

are easily put up or removed—no tools or ladder necessary. Write for free sample pair.

Sold by Hardware Jobbers and Dealers.

Manufactured by

F. D. KEES, Beatrice, Neb.

SPERRY'S CALDRONS

Full measure, guaranteed perfect original patterns, with metal distributed where it is needed. Many Caldrons are made from our casting as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

Twelve sizes always in stock.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

A SQUARE DEAL

—FOR—

Square Dealers

Square dealers, we take it, are those who try to give their customers goods that are "square"—honest all through. For forty years we have been giving all dealers the "square deal."

We make all the "ENTERPRISE" hardware specialties just as good as we know how—then we go out and tell the public, of all the world, about their merits. Square Dealers *distribute* them—they are already *sold.* Just ahead is the big demand for

"ENTERPRISE"

Meat and Food Choppers and "ENTERPRISE" Sausage Stuffers, Lard and Fruit Presses. They are being widely advertised now to the public. Write for our literature about them, including our new catalogue of all the "ENTERPRISE" specialties. Get ready for the biggest season you have ever seen on "ENTERPRISE" goods. We are ready. Get your share.

Increase your sale of "Enterprise" Meat and Food Choppers by using our new booklet: "The Cook, Her Critic and—". We will send you a supply of these on request.

The Enterprise Manufacturing Co. of Pa.

New York Office, 10 Warren St.

Philadelphia, U. S. A.

San Francisco Office, 105 Front St.

A CLEAN SHOT

One of the beauties of PETERS "Referee" shells is their clean way of bringing down game. They develop as much velocity and killing power as smokeless. Being loaded with Semi-Smokeless powder, they are extremely clean and do not foul the gun.

PETERS "League" loaded with black powder is the best shell of its grade on the market.

PETERS smokeless shells, "Ideal," "Target," "High Gun," and "Premier" are preferred and used with great success by multitudes of sportsmen in every section of the country.

PETERS Metallic Cartridges loaded with the famous Semi-Smokeless powder have attained a standard of quality and have won victories in the great championship matches, not approached by any other make. It therefore behooves

DEALERS IN AMMUNITION

to investigate these claims and take advantage of the business which Peters quality and Peters advertising are making.

If you are not handling this line at present, ask your jobber for full information or if you prefer, write us direct. It will pay you to put in a stock of Peters goods, the line that gives both profit and satisfaction.

THE PETERS CARTRIDGE COMPANY, Cincinnati, Ohio

NEW YORK, 98 Chambers St., T. H. KELLER, Manager

FLAT CRIMP EXPANDING ELBOWS

No. 1 — Round Corrugated, Plain Round

No. 2 — Octagon, Polygon

No. 3 — Square "H", Square "B"

PATENTED JUNE 4, 1895

Made of One Piece

None Genuine Without Signature

F. Dieckmann

Station B, CINCINNATI

You Can't Learn It Too Quickly

An honest count, honest goods and quick shipments from an immense stock are the first requisites of successful retailing.

LEE-GLASS-ANDREESEN HDW. CO.
Jobbers in Hardware OMAHA

McClure's Roofing Tin

Better values for your money in roofing tin than you've ever had before. **Let us prove it.**
Write for samples and prices.

The McClure Co.
Pittsburgh Philadelphia

NOTICE!

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and Continent. References furnished. Address
EXHIBIT & TRADING CO., Main Office, 72 Henry St., Liverpool, England

FOLLANSBEE BROS. CO. SECURITY PITTSBURG IC

A MODERATE PRICE ROOFING TIN.

EXTRA VALUE.

TRY IT.

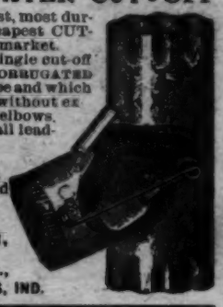
Tinners Find Employment
By advertising and using
THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give Tinners employment making stocks, and give the dealers profit

Sold by Hardware Jobbers and Dealers.
Made only by
POWERS BROS.
STREATOR, ILL.
This cut free to dealers.

The "CENTENNIAL" RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.
The only single cut-off made to fit CORRUGATED and Plain pipe and which can be used without extra pipe or elbows.
For sale by all leading jobbers.
Patent applied for.
Manufactured only by
COONEY & GEIGER,
19 and 21 East South St.,
INDIANAPOLIS, IND.



Do you install Hot Air Furnaces?

We make Heater Pipe Tin in all standard sizes, ready to be made up into Pipes from 7 to 12 inches in diameter. Can supply larger sizes if you wish.

One important feature is the promptness with which we ship your orders.

We make attractive inducements, too.

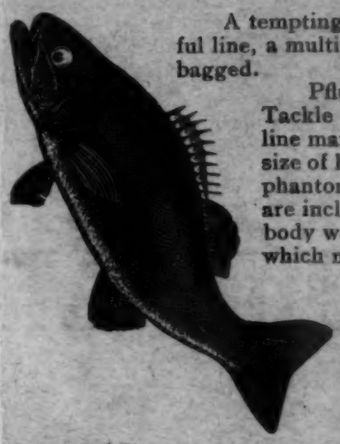
Price list for the asking.

ILLINOIS ROOFING & SUPPLY COMPANY
23 Lake Street, CHICAGO

The Catchy Line

Pflueger's

Celebrated Fishing Tackle



A tempting bait, a strong hold, a powerful line, a multiplying reel—and the game is bagged.

Pflueger's Celebrated Fishing Tackle is easily the most extensive line manufactured. Every kind and size of hooks, flies, trolls, spinners, phantoms, reels, furnished lines, etc., are included—everything which anybody would want and many things of which most people have never heard.

We have the largest manufacturing facilities of this nature in the country.

NOTICE—Free to any Dealer in Sporting Goods, sent express prepaid, 155-page illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-color Lithograph.

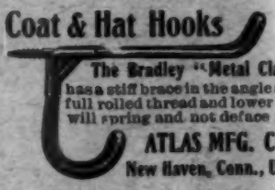
The Enterprise Mfg. Co.

AKRON, OHIO

OSGOOD STANDARD SCALES

Ask your jobber about them.

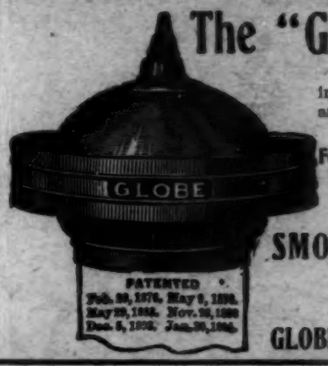
Coat & Hat Hooks



The Bradley "Metal Clasp" has a stiff brace in the angle and a full rolled thread and lower hook will spring and not deface wall.

ATLAS MFG. CO.
New Haven, Conn., U.S.A.

The "GLOBE" Ventilator



in BRASS, COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

For Perfectly Ventilating Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

SMOKY CHIMNEYS CURED

"GLOBE" Ventilated Ridges.
Send for Pamphlet.

Manufactured by
GLOBE VENTILATOR CO., Troy, N. Y.

Our Reputation

is behind every hand saw which bears our factory brand.

With this guarantee of Quality it is no wonder that dealers find a line of **Atkins Celebrated Silver Steel Hand Saws** the fastest selling and most profitable stock that they can carry. **Quality is the thing.**

CATALOG AND DISCOUNTS FURNISHED ON REQUEST.

Branches:
MEMPHIS, TENN.
ATLANTA, GA.
NEW YORK CITY
TORONTO, CANADA
MINNEAPOLIS, MINN.

E. C. ATKINS & CO.
Indianapolis, Ind.

Branches:
38 S. Canal St.,
CHICAGO, ILL.
PORTLAND, OREGON
SEATTLE, WASH.
SAN FRANCISCO, CAL.